

# DISCRETE THYRISTORS

## Phase Control SCR / Inverter Grade SCR

### Applications Include:

- Battery Chargers
- Flexible AC Transmissions
- HVDC
- Induction Heating
- Medical Equipment
- Medium Voltage Inverters
- Motor Controls
- Power Supplies
- Soft Starters
- Traction Inverters
- Transportation
- UPS
- VAR Generators
- Welding

### Packages:

- Discrete Discs
- Discrete Studs

### Features:

- Nickel Plating Finish
- Hermetic Encapsulation for Long-Term Reliability to  $1 \times 10^{-6}$  cc/He/sec

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### Phase Control SCRs:

**VOLTAGE: 100V TO 6500V**

**CURRENT: 40A TO 5000A**

### Inverter Grade SCRs:

**VOLTAGE: 200V TO 2000V**

**CURRENT: 40A TO 2100A**

DC-DC  
Converters

Gate Drivers  
& IPM  
Interface

Custom  
Modules

IGBT  
Assemblies

Assemblies

Fast Recovery  
Diode Modules

Thyristor &  
Diode  
Modules

Discrete  
Rectifiers

**Discrete  
Thyristors**

DIPIPM

IPMs

MOSFET  
Modules

Hybrid  
& SiC  
Modules

IGBTs

# Numbering System

T7S0246504DN is a 650 Ampere, 2400 Volt, Phase Control SCR

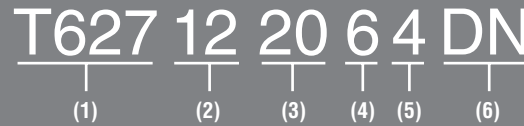


- (1) Type Number
- (2) Voltage Rating (x 100)
- (3) Current Rating:  
 T5 (x 1)  
 T6, T7, T8 (x 10)  
 T9, TA, TB, TC, TD (x 100)

(4) Turn-off Time (T<sub>q</sub>) Codes for SCR Part Numbers

Code	Time (μsec)	Code	Time (μsec)
0	Phase Control	2	60
9	8	C	70
8	10	1	80
7	15	K	100
6	20	M	125
B	25	N	150
5	30	P	175
L	35	Q	200
4	40	R	250
3	50		

T627122064DN is a 200 Ampere, 1200 Volt, Inverter Grade SCR



(5) Maximum Gate Current to Trigger (I<sub>gt</sub>) Codes for SCR Part Numbers

Code	I <sub>gt</sub> (mA)
7	70
K	75
6	80
5	100
F	120
4	150
G	180
3	200
H	250
2	300
1	500
X	Not Applicable

(6) Lead Code - Refer to Standard Lead Table

C712L is a 1000 Ampere, 2000 Volt, Inverter Grade SCR




- (1) Type Number
- (2) Voltage Code  
 PB = 1200V  
 PD = 1400V  
 PM = 1600V  
 PN = 1800V  
 L = 2000V


## Standard Leads

Device Type	Lead Code	Description
<b>Disc</b>		
Disc	DN	Gate leads: 8" with #6 ring terminals
Disc	DH	Gate leads: 12" with #6 ring terminals
Disc	HE	Gate leads: 20" with #6 ring terminals
<b>Stud</b>		
T5	AQ	Power Lead: 6.04" from seating plane to center of 0.266" diameter hole in terminal lug, Gate leads: 7.34" with #6 ring terminals
T6	BT	Power Lead: 7.85" from seating plane to center of 0.281" diameter hole in terminal lug, Gate leads: 7.86" with #6 ring terminals
T7	BY	Power Lead: 9.66" from seating plane to center of 0.343" diameter hole in terminal lug, Gate leads: 10.03" with #6 ring terminals (Note: High Voltage T7 studs with convoluted seal will have power lead 9.88" from seating plane to center of 0.343" diameter hole in terminal lug, Gate leads: 10.03" with #6 ring terminals)

**Phase Control SCRs - Disc/Hockey Puk** (Refer to device datasheets at [www.pwr.com](http://www.pwr.com) for test conditions.)

Type		$V_{DRM} / V_{RRM}$ Volts ( $V_{RSM} = V_{RRM} + 100V$ )	$I_{T(av) / T_C}$ Amperes/°C (180° sin)	$I_{T(RMS)}$ Amperes (180° sin)	EUROPEAN		NORTH AMERICAN		$V_{TM} / I_{TM}$ Volts/Amperes ( $T_{j(max)}$ )	$V_{TO}$ Volts ( $T_{j(max)}$ )	$R_T$ mΩ ( $T_{j(max)}$ )	$di/dt$ Amperes/usec (Non-Repetitive)	$T_q$ usec (Typical)	$dV/dt$ Volts/usec	$R_{th(j-c)}$ °C/W	$R_{th(c-s)}$ °C/W	$T_{j(max)}$ °C	Outline Drawings		
					$I_{TSM}$ Amperes (10ms, $T_{j(max)}$ ). No $V_{RRM}$ Reapplied)	$i^2t$ A <sup>2</sup> sec (10ms, $T_{j(max)}$ ). No $V_{RRM}$ Reapplied)	$I_{TSM}$ Amperes (8.3ms, $T_{j(max)}$ ). 100% $V_{RRM}$ Reapplied)	$i^2t$ A <sup>2</sup> sec (8.3ms, $T_{j(max)}$ ). 100% $V_{RRM}$ Reapplied)										Number	Page	
<b>Up to 1800V</b>																				
T620--2004DN		200 – 1600	200 / 88	315	6,000	180,000	4,000	64,000	1.98 / 500	1.13	1.72	800	100	300	0.08	0.02	125	1	F-8	
T620--3004DN		200 – 1600	300 / 80	470	8,250	340,313	5,500	120,000	1.49 / 500	0.99	1.05	800	100	300	0.08	0.02	125	1	F-8	
T625--4004DN		200 – 1200	400 / 80	625	7,500	281,250	5,000	100,000	1.1 / 200	0.77	1.24	800	150	300	0.08	0.02	150	1	F-8	
T7H8--6504DN		200 – 1600	650 / 65	1,020	13,500	911,250	9,000	338,000	1.38 / 500	1.034	0.629	600	150	300	0.04	0.02	125	2	F-8	
T7M8--6504DN		200 – 1600	650 / 65	1,020	13,500	911,250	9,000	338,000	1.38 / 500	1.034	0.629	600	1500	300	0.04	0.02	125	3	F-8	
T7H8--7504DN		200 – 1600	750 / 62	1,180	15,750	1.2 x 10 <sup>6</sup>	10,500	460,000	1.50 / 1000	0.972	0.482	600	150	300	0.04	0.02	125	2	F-8	
T7M8--7504DN		200 – 1600	750 / 62	1,180	15,750	1.2 x 10 <sup>6</sup>	10,500	460,000	1.50 / 1000	0.972	0.482	600	1500	300	0.04	0.02	125	3	F-8	
T820--9004DH		200 – 1600	900 / 70	1,410	22,500	2.5 x 10 <sup>6</sup>	15,000	935,000	1.20 / 1000	0.785	0.351	400	300	300	0.037	0.02	125	5	F-9	
T820--1404DH		400 – 800	1450 / 70	5,419	17,253	1.4 x 10 <sup>6</sup>	12,200	620,000	1.20 / 1500 (25°C)	0.79	0.12	200	400	600	0.037	0.0085	140	5	F-9	
T9G0--1603DH		1200 – 1800	1660 / 70	2,600	27,400	3.75 x 10 <sup>6</sup>	20,000	1.67 x 10 <sup>6</sup>	1.25 / 1500 (25°C)	0.834	0.164	1,000	150	400	0.023	0.006	125	7	F-10	
T9S0--2003DH		1200 – 1800	2000 / 70	3,142	25,456	3.24 x 10 <sup>6</sup>	18,500	1.44 x 10 <sup>6</sup>	1.15 / 1500	0.755	0.226	200	400	1,000	0.015	0.0025	125	6	F-9	
TAS0--2603DH		1400 – 1800	2635 / 70	4,139	35,826	6.42 x 10 <sup>6</sup>	26,174	2.85 x 10 <sup>6</sup>	0.99 / 1500	0.735	0.16	300	550	800	0.01	0.003	125	8	F-10	
T9S0--2803DH		400 – 800	2850 / 70	4477	34,884	6.08 x 10 <sup>6</sup>	25,400	2.71 x 10 <sup>6</sup>	1.15 / 1500 (25°C)	0.722	0.0883	200	400	1000	0.015	0.0025	125	6	F-9	
TBK7--300HHE		200 – 600	3000 / 70	4,710	72,000	25.9 x 10 <sup>6</sup>	48,000	9.6 x 10 <sup>6</sup>	0.97 / 3000	0.692	0.087	600	400	300	0.012	0.002	125	10	F-11	
TBK5--3203DH		800 – 1600	3200 / 74	5,027	58,454	1.71 x 10 <sup>6</sup>	42,700	7.60 x 10 <sup>6</sup>	1.05 / 2000	0.826	0.107	200	400	1000	0.01	0.002	125	10	F-11	
T9S0--3403DH		400 – 800	3450 / 70	5,419	33,469	5.60 x 10 <sup>6</sup>	24,450	2.49 x 10 <sup>6</sup>	1.15 / 1500 (25°C)	0.722	0.0883	200	600	600	0.015	0.0025	125	6	F-9	
TBS7--350HHE		200 – 1600	3500 / 72	5,600	72,000	25.9 x 10 <sup>6</sup>	48,000	9.6 x 10 <sup>6</sup>	0.97 / 3000	0.692	0.087	600	400	300	0.010	0.002	125	11	F-11	
<b>Up to 2400V</b>																				
T720--3504DN		200 – 2400	350 / 77	550	10,500	551,250	7,000	205,000	1.61 / 500	1.040	1.09	600	150	300	0.06	0.02	125	5	F-9	
T720--4504DN		200 – 2400	450 / 65	700	12,600	793,800	8,400	295,000	1.25 / 300	0.93	0.90	600	150	300	0.06	0.02	125	5	F-9	
T720--5504DN		200 – 2400	550 / 65	850	15,000	1.1 x 10 <sup>6</sup>	10,000	416,000	1.0 / 200	0.99	0.47	600	150	300	0.06	0.02	125	5	F-9	
T7S0--6504DN		1800 – 2400	650 / 70	1,020	13,500	911,250	9,000	338,000	1.38 / 500	1.00	0.701	600	150	300	0.035	0.02	125	4	F-9	
T7S0--7504DN		1800 – 2400	750 / 73	1,180	15,750	1.2 x 10 <sup>6</sup>	10,500	460,000	1.50 / 1000	0.972	0.482	600	150	300	0.035	0.02	125	4	F-9	
T820--7504DH		200 – 2400	750 / 70	1,175	18,000	1.6 x 10 <sup>6</sup>	12,000	600,000	1.52 / 1000	0.927	0.495	400	200	300	0.037	0.020	125	5	F-9	
T9G0--1003DH		200 – 2400	1000 / 82	1,590	25,500	3.2 x 10 <sup>6</sup>	17,000	1.2 x 10 <sup>6</sup>	1.0 / 300	0.904	0.491	600	250	1000	0.023	0.006	125	7	F-10	
T9G0--1203DH		200 – 2400	1200 / 85	1,880	40,500	8.2 x 10 <sup>6</sup>	27,000	3.0 x 10 <sup>6</sup>	0.97 / 1000	0.606	0.268	300	350	300	0.023	0.008	125	7	F-10	
TA20--1603DH		200 – 2200	1600 / 80	2,500	44,250	9.7 x 10 <sup>6</sup>	29,500	3.63 x 10 <sup>6</sup>	1.12 / 1000	0.891	0.215	400	250	300	0.015	0.007	125	9	F-10	
T9S0--1803DH		1600 – 2200	1800 / 70	2,827	19,422	1.89 x 10 <sup>6</sup>	13,735	1.77 x 10 <sup>6</sup>	1.38 / 1500	1.025	0.23	200	400	1000	0.015	0.0025	125	6	F-9	
TA20--1803DH		200 – 2200	1800 / 85	2,820	60,000	18.0 x 10 <sup>6</sup>	40,000	6.67 x 10 <sup>6</sup>	0.89 / 1000	0.719	0.167	400	250	300	0.015	0.007	125	9	F-10	
TBK7--250HHE		1200 – 2100	2500 / 72	3,925	67,500	22.7 x 10 <sup>6</sup>	45,000	8.5 x 10 <sup>6</sup>	1.35 / 2000	0.95	0.123	600	250	500	0.012	0.002	125	10	F-11	
TDS5--5003DH		1200 – 2000	5000 / 68	7,854	84,852	3.60 x 10 <sup>7</sup>	62,000	1.6 x 10 <sup>7</sup>	1.15 / 4000	0.85	0.0658	300	500	500	0.0065	0.0015	125	16	F-13	

**Phase Control SCRs - Disc/Hockey Puk (Continued)** (Refer to device datasheets at [www.pwr.com](http://www.pwr.com) for test conditions.)

Type	 $V_{DRM} / V_{RRM}$ Volts ( $V_{RSM} = V_{RRM} + 100V$ )	$I_{T(av)TC}$ Amperes/°C (180° sin)	$I_T(RMS)$ Amperes (180° sin)	EUROPEAN		NORTH AMERICAN		$V_{TM}/I_{TM}$ Volts/Amperes ( $T_{j(max)}$ )	$V_{T0}$ Volts ( $T_{j(max)}$ )	$R_T$ mΩ ( $T_{j(max)}$ )	$di/dt$ Amperes/μsec (Non-Repetitive)	$T_q$ μsec (Typical)	$dV/dt$ Volts/μsec	$R_{th(j-c)}$ °C/W	$R_{th(c-s)}$ °C/W	$T_{j(max)}$ °C	Outline Drawings	
				$I_{TSM}$ Amperes (10ms, $T_{j(max)}$ ), No $V_{RRM}$ Reapplied)	$i^2t$ A <sup>2</sup> sec (10ms, $T_{j(max)}$ ), No $V_{RRM}$ Reapplied)	$I_{TSM}$ Amperes (8.3ms, $T_{j(max)}$ ), 100% $V_{RRM}$ Reapplied)	$i^2t$ A <sup>2</sup> sec (8.3ms, $T_{j(max)}$ ), 100% $V_{RRM}$ Reapplied)										Number	Page
<b>Up to 4500V</b>																		
T8K7--3503DH	3600 – 4500	350 / 76	550	8,250	340,313	5,500	100,000	3.50 / 1000	1.562	2.141	500	250	1000	0.040	0.020	125	5	F-9
T9K7--0802DH	3600 – 4500	800 / 79	1,250	13,500	911,250	9,000	337,500	1.79 / 1000	1.213	0.602	200	500	800	0.023	0.008	125	7	F-10
TAK7--1202DH	3600 – 4400	1200 / 82	1,700	60,000	18.0 x 10 <sup>6</sup>	40,000	6.67 x 10 <sup>6</sup>	1.90 / 1500	1.262	0.397	400	500	1000	0.015	0.007	125	9	F-10
TAS7--1603DH	3200 – 4400	1650 / 70	2,592	20,742	2.15 x 10 <sup>6</sup>	15,154	956,845	2.00 / 1500	0.881	0.374	300	550	800	0.01	0.003	125	8	F-10
TBK7--1702HE	3600 – 4500	1650 / 70	2,590	39,000	7.6 x 10 <sup>6</sup>	26,000	2.75 x 10 <sup>6</sup>	1.85 / 2000	1.033	0.358	600	400	1000	0.012	0.002	125	10	F-11
TAK7--1803DH	2400 – 3200	1800 / 70	2,827	22,156	2.45 x 10 <sup>6</sup>	16,180	1.09 x 10 <sup>6</sup>	1.40 / 1500	0.881	0.374	300	550	800	0.15	0.007	125	9	F-10
TBKD--190HDH	3600 – 4500	1890 / 70	2,969	31,678	5.02 x 10 <sup>6</sup>	23,000	2.23 x 10 <sup>6</sup>	1.70 / 2000	1.13	0.275	200	600	1000	0.012	0.002	125	10	F-11
TC20--2402DH	3600 – 4400	2450 / 74	3,848	28,284	4.00 x 10 <sup>6</sup>	20,664	1.78 x 10 <sup>6</sup>	1.80 / 3000	0.99	0.271	300	500	400	0.009	0.003	125	13	F-12
TBS4--250HDH	3000 – 3600	2500 / 70	3,927	32,055	5.14 x 10 <sup>6</sup>	23,400	2.29 x 10 <sup>6</sup>	1.50 / 2000	1.026	0.233	200	600	1000	0.0085	0.002	125	11	F-11
TBSX33300HDH	3300	3000 / 70	4,712	62,750	1.97 x 10 <sup>7</sup>	45,800	8.76 x 10 <sup>6</sup>	1.27 / 2000	0.909	0.15	200	600	1000	0.0085	0.002	125	11	F-11
TCU4--320HDH	2400 – 2800	3200 / 70	5,027	72,000	2.59 x 10 <sup>7</sup>	52,600	1.15 x 10 <sup>7</sup>	1.45 / 3000	1.062	0.121	400	400	1000	0.008	0.002	125	12	F-11
TCU4--340HDH	2400 – 2800	3400 / 70	5,341	75,424	2.84 x 10 <sup>7</sup>	55,000	1.27 x 10 <sup>7</sup>	1.35 / 3000	0.978	0.112	400	400	1000	0.008	0.002	125	12	F-11
TDK4--3302DH	3600 – 4400	3300 / 72	5,184	47,140	1.11 x 10 <sup>7</sup>	31,427	1.04 x 10 <sup>7</sup>	1.60 / 3000	0.991	0.196	300	400	2000	0.005	0.001	125	15	F-12
TCS4--340HDH	1800 – 2800	3400 / 70	5,341	56,568	1.60 x 10 <sup>7</sup>	37,712	1.50 x 10 <sup>7</sup>	1.34 / 3000	0.915	0.14	600	400	1000	0.007	0.001	125	14	F-12
TDS4--3402DH	3000 – 3600	3475 / 70	5,459	67,200	2.26 x 10 <sup>7</sup>	49,000	2.26 x 10 <sup>7</sup>	1.50 / 4000	0.914	0.15	300	600	800	0.007	0.0015	125	16	F-13
<b>Up to 6500V</b>																		
T8K8--3203DH	6000 – 6500	325 / 75	511	4,243	9 x 10 <sup>4</sup>	2,950	36,260	4.40 / 1000	1.17	3.26	200	450	1000	0.038	0.007	125	5	F-9
T9K8--0603DH	6000 – 6500	600 / 73	942	7,307	2.67 x 10 <sup>5</sup>	5,040	105,840	3.70 / 1500	1.32	1.58	300	600	1000	0.023	0.006	125	7	F-10
TBK8--1203DH	6000 – 6500	1250 / 70	1,963	20,742	2.15 x 10 <sup>6</sup>	14,300	852,042	2.70 / 2000	1.153	0.744	200	800	1000	0.011	0.001	125	10	F-11

## Phase Control SCRs - Studs (Refer to device datasheets at [www.pwr.com](http://www.pwr.com) for test conditions.)

Type	$V_{DRM} / V_{RRM}$ Volts ( $V_{NSM} = V_{RRM} + 100V$ )	$I_{T(av)}/T_C$ Amperes/°C (180° sin)	$I_T(RMS)$ Amperes (180° sin)	EUROPEAN		NORTH AMERICAN		$V_{TM}/I_{TM}$ Volts/Amperes ( $T_{j(max)}$ )	$V_{T0}$ Volts ( $T_{j(max)}$ )	$R_T$ mΩ ( $T_{j(max)}$ )	$di/dt$ Amperes/μsec (Non-Repetitive)	$T_q$ μsec (Typical)	$dV/dt$ Volts/μsec	$R_{th(j-c)}$ °C/W	$R_{th(c-s)}$ °C/W	$T_{j(max)}$ °C	Outline Drawings	
				$I_{TSM}$ Amperes (10ms, $T_{j(max)}$ ), No $V_{RRM}$ Reapplied)	$i^2t$ A <sup>2</sup> sec (10ms, $T_{j(max)}$ ), No $V_{RRM}$ Reapplied)	$I_{TSM}$ Amperes (8.3ms, $T_{j(max)}$ ), 100% $V_{RRM}$ Reapplied)	$i^2t$ A <sup>2</sup> sec (8.3ms, $T_{j(max)}$ ), 100% $V_{RRM}$ Reapplied)										Number	Page
<b>Up to 1600V</b>																		
T500--4004AQ	200 – 1600	40 / 97	63	1,800	16,200	1,200	6,000	2.02 / 100	0.91	11.85	800	100	300	0.28	0.12	125	17	F-13
T500--8004AQ	200 – 1600	80 / 75	125	2,700	36,450	1,800	13,500	1.43 / 100	0.99	3.57	800	100	300	0.28	0.12	125	17	F-13
T600--1504BT	200 – 1600	150 / 90	235	6,000	180,000	4,000	66,000	1.41 / 200	1.07	1.46	800	100	300	0.13	0.075	125	19	F-14
T650--1504BT	200 – 1600	150 / 90	235	6,000	180,000	4,000	66,000	1.41 / 200	1.07	1.46	800	100	300	0.13	0.075	125	18	F-13
T600--1804BT	200 – 1600	175 / 88	275	8,250	340,313	5,500	120,000	1.20 / 200	0.90	1.26	800	100	300	0.13	0.075	125	19	F-14
T650--1804BT	200 – 1600	175 / 88	275	8,250	340,313	5,500	120,000	1.20 / 200	0.90	1.26	800	100	300	0.13	0.075	125	18	F-13
T700--2504BY	200 – 1600	250 / 75	400	10,500	551,250	7,000	205,000	1.16 / 100	1.06	1.01	800	150	300	0.10	0.05	125	21	F-14
T750--2504BY	200 – 1600	250 / 75	400	10,500	551,250	7,000	205,000	1.16 / 100	1.06	1.01	800	150	300	0.10	0.05	125	20	F-14
<b>Up to 2400V</b>																		
T700--3004BY	200 – 2400	300 / 65	470	12,600	793,800	8,400	295,000	0.98 / 100	0.88	0.92	800	150	300	0.10	0.05	125	21	F-14
T750--3005BY	200 – 2400	300 / 65	470	12,600	793,800	8,400	295,000	0.98 / 100	0.88	0.92	800	150	300	0.10	0.05	125	20	F-14
T700--3504BY	200 – 2400	350 / 80	550	15,000	1.1 x 10 <sup>6</sup>	10,000	416,000	0.98 / 200	0.83	0.61	800	150	300	0.10	0.05	125	21	F-14
T750--3504BY	200 – 2400	350 / 80	550	15,000	1.1 x 10 <sup>6</sup>	10,000	416,000	0.98 / 200	0.83	0.61	800	150	300	0.10	0.05	125	20	F-14

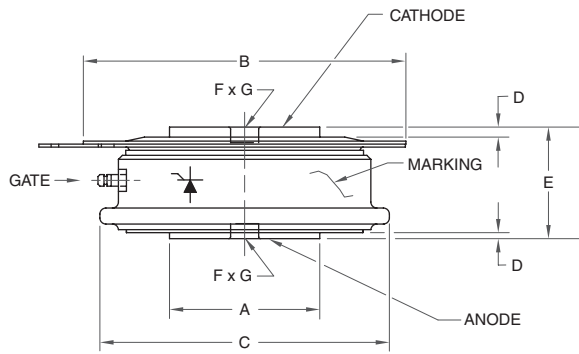
## Inverter Grade Disc/Hockey Puk SCRs (Refer to device datasheets at [www.pwr.com](http://www.pwr.com) for test conditions.)

Type	$V_{DRM} / V_{RRM}$ Volts ( $V_{RSM} = V_{RRM} + 100V$ )	$I_{(av)}/T_C$ Amperes/°C (180° sin)	$I_{T(RMS)}$ Amperes (180° sin)	EUROPEAN		NORTH AMERICAN		$V_{TM}/I_{TM}$ Volts/Amperes ( $T_{j(max)}$ )	$V_{TO}$ Volts ( $T_{j(max)}$ )	$R_T$ mΩ ( $T_{j(max)}$ )	di/dt Amperes/μsec (Non-Repetitive)	$T_q$ μsec (Typical)	dV/dt Volts/μsec	$R_{th(j-c)}$ °C/W	$R_{th(c-s)}$ °C/W	$T_{j(max)}$ °C	Outline Drawings	
				$I_{TSM}$ Amperes (10ms, $T_{j(max)}$ ), No $V_{RRM}$ Reapplied)	$i^2t$ A <sup>2</sup> sec (10ms, $T_{j(max)}$ ), No $V_{RRM}$ Reapplied)	$i_{TSM}$ Amperes (8.3ms, $T_{j(max)}$ ), No $V_{RRM}$ Reapplied)	$i^2t$ A <sup>2</sup> sec (8.3ms, $T_{j(max)}$ ), No $V_{RRM}$ Reapplied)										Number	Page
<b>Up to 1200V</b>																		
T727--35*4DN	100 – 1200	350 / 70	550	10,500	551,250	7,000	205,000	1.70 / 600	1.27	0.71	800	15 – 60	300	0.06	0.02	125	5	F-9
T72H--35*4DN	100 – 1200	350 / 70	550	10,500	551,250	7,000	205,000	2.09 / 500	1.77	0.68	1200	10 – 50	300	0.06	0.02	125	5	F-9
T727--40*4DN	100 – 800	400 / 70	625	10,500	551,250	7,000	205,000	1.55 / 500	1.40	0.34	800	10 – 50	300	0.06	0.02	125	5	F-9
T72H--40*4DN	100 – 800	400 / 70	625	10,500	551,250	7,000	205,000	1.49 / 500	1.19	0.55	1200	10 – 20	300	0.06	0.02	125	5	F-9
T7SH--40*4DN	100 – 1200	400 / 70	700	12,000	720,000	8,000	267,000	2.11 / 500	1.76	0.73	1200	10 – 50	300	0.045	0.02	125	4	F-9
T727--48*4DN	100 – 800	475 / 70	750	12,000	720,000	8,000	265,000	1.37 / 500	1.35	0.44	800	15 – 50	300	0.06	0.02	125	5	F-9
T72H--48*4DN	100 – 800	475 / 70	750	12,000	720,000	8,000	265,000	1.37 / 500	1.14	0.44	1200	20 – 40	300	0.06	0.02	125	5	F-9
T7S7--50*4DN	100 – 1200	500 / 70	786	12,000	720,000	8,000	267,000	1.62 / 500	1.29	0.65	800	15 – 60	300	0.035	0.02	125	2	F-8
T7SH--50*4DN	100 – 800	500 / 70	780	12,750	812,813	8,500	301,000	1.44 / 500	1.18	0.43	1200	10 – 20	300	0.045	0.02	125	4	F-9
T7S7--55*4DN	100 – 800	550 / 70	864	12,750	812,813	8,500	301,000	1.53 / 500	1.36	0.34	800	10 – 50	300	0.035	0.02	125	2	F-8
T7SH--60*4DN	100 – 800	600 / 70	950	13,500	911,250	9,000	338,000	1.04 / 500	0.90	0.28	1200	20 – 40	300	0.045	0.02	125	4	F-9
T7S7--65*4DN	100 – 800	650 / 70	1,026	14,250	1.0 x 10 <sup>6</sup>	9,500	376,000	1.36 / 500	1.15	0.40	800	10 – 50	300	0.035	0.02	125	2	F-8
<b>Up to 1600V</b>																		
T627--15*4DN	100 – 1600	150 / 70	235	5,250	137,813	3,500	50,000	1.64 / 100	1.41	1.80	800	10 – 50	300	0.08	0.02	125	1	F-8
T627--20*4DN	100 – 1600	200 / 70	315	6,000	180,000	4,000	65,000	1.48 / 100	1.27	1.50	800	10 – 50	300	0.08	0.02	125	1	F-8
T627--25*4DN	100 – 1600	250 / 70	400	6,750	227,813	4,500	84,000	1.38 / 100	1.22	1.12	800	10 – 50	300	0.08	0.02	125	1	F-8
T727--45*4DN	100 – 1600	450 / 70	700	12,000	720,000	8,000	265,000	1.42 / 500	1.14	0.57	800	15 – 60	300	0.06	0.02	125	5	F-9
T72H--45*4DN	100 – 1600	450 / 70	700	11,250	632,813	7,500	234,000	1.55 / 500	1.08	0.79	1200	15 – 50	300	0.06	0.02	125	5	F-9
T7SH--45*4DN	100 – 1600	450 / 70	700	12,750	812,813	8,500	301,000	1.80 / 800	1.05	0.96	1200	15 – 50	300	0.045	0.02	125	4	F-9
T7S7--60*4DN	100 – 1600	600 / 70	943	13,500	911,250	9,000	338,000	1.44 / 500	1.16	0.56	800	15 – 60	300	0.035	0.02	125	2	F-8
T82F--65*3DN	100 – 1400	650 / 70	1,000	12,750	812,813	8,500	300,000	1.75 / 1000	1.46	0.30	1000	10 – 50	400	0.037	0.02	125	5	F-9
T82F--75*3DN	100 – 1400	750 / 70	1,180	15,000	1.1 x 10 <sup>6</sup>	10,000	416,000	1.52 / 1000	1.21	0.29	1200	25 – 60	400	0.037	0.02	125	5	F-9
T9GH--08*2DH	100 – 1600	800 / 70	1,250	15,000	1.1 x 10 <sup>6</sup>	10,000	416,000	1.98 / 1000	1.58	0.41	1000	20 – 100	400	0.023	0.075	125	7	F-10
T9GH--09*2DH	100 – 1600	900 / 70	1,400	19,500	1.9 x 10 <sup>6</sup>	13,000	700,000	1.73 / 1000	1.32	0.40	1000	20 – 100	400	0.023	0.075	125	7	F-10
T9GH--10*2DH	100 – 1600	1000 / 70	1,570	22,500	2.5 x 10 <sup>6</sup>	15,000	937,000	1.70 / 1000	1.29	0.40	1000	20 – 60	400	0.023	0.075	125	7	F-10
T9GH--11*2DH	100 – 1600	1100 / 70	1,725	25,500	3.2 x 10 <sup>6</sup>	17,000	1.2 x 10 <sup>6</sup>	1.39 / 1000	1.12	0.25	1000	40 – 60	100	0.023	0.075	125	7	F-10
<b>Up to 2000V</b>																		
T7SH--36*4DN	1400 – 1800	360 / 70	565	9,000	405,000	6,000	297,000	2.19 / 500	1.81	0.81	800	40 – 60	300	0.045	0.02	125	4	F-9
T72H--42*4DN	100 – 1800	420 / 70	650	10,200	520,200	6,800	205,000	1.67 / 700	1.27	0.57	1200	15 – 100	300	0.06	0.02	125	5	F-9
T7SH--46*4DN	100 – 1800	460 / 70	720	10,200	520,200	6,800	301,000	1.47 / 500	1.22	0.58	800	15 – 70	300	0.045	0.02	125	4	F-9
C712	100 – 2000	1000 / 70	1,570	30,000	4.5 x 10 <sup>6</sup>	20,000	1.6 x 10 <sup>6</sup>	1.50 / 1000	1.13	0.35	800	55	500	0.023	0.075	125	7	F-10
C770	100 – 2000	2100 / 70	3,300	57,000	16.2 x 10 <sup>6</sup>	38,000	6.0 x 10 <sup>6</sup>	1.55 / 1000	1.27	0.26	800	80	500	0.012	0.002	125	10	F-11

## Inverter Grade Stud SCRs (Refer to device datasheets at [www.pwr.com](http://www.pwr.com) for test conditions.)

Type	$V_{DRM} / V_{RRM}$ Volts ( $V_{RSM} = V_{RRM} + 100V$ )	$I_{(av)} T_C$ Amperes/°C (180° sin)	$I_T(RMS)$ Amperes (180° sin)	EUROPEAN		NORTH AMERICAN		$V_{TM}/T_M$ Volts/Amperes ( $T_{j(max)}$ )	$V_{T0}$ Volts ( $T_{j(max)}$ )	$R_T$ mΩ ( $T_{j(max)}$ )	di/dt Amperes/μsec (Non-Repetitive)	$T_{\theta}$ μsec (Typical)	dV/dt Volts/μsec	$R_{th(j-c)}$ °C/W	$R_{th(c-s)}$ °C/W	$T_{j(max)}$ °C	Outline Drawings	
				$I_{TSM}$ Amperes (10ms, $T_{j(max)}$ ), No $V_{RRM}$ Reapplied)	$i^2t$ A <sup>2</sup> sec (10ms, $T_{j(max)}$ ), No $V_{RRM}$ Reapplied)	$i_{TSM}$ Amperes (8.3ms, $T_{j(max)}$ ), No $V_{RRM}$ Reapplied)	$i^2t$ A <sup>2</sup> sec (8.3ms, $T_{j(max)}$ ), No $V_{RRM}$ Reapplied)										Number	Page
<b>Up to 1200V</b>																		
T607--13*4BT	100 – 1200	125 / 70	200	5,250	137,813	3,500	50,000	1.63 / 100	1.37	2.10	800	10 – 50	300	0.13	0.08	125	19	F-14
T707--25*4BY	100 – 1200	250 / 70	400	10,500	551,250	7,000	205,000	1.46 / 500	1.29	0.43	800	25 – 60	300	0.10	0.05	125	21	F-14
T707--28*4BY	100 – 1000	275 / 70	430	10,500	551,250	7,000	205,000	1.58 / 700	1.34	0.33	800	10 – 50	300	0.10	0.05	125	21	F-14
<b>Up to 1600V</b>																		
T507--40*4AQ	100 – 1600	40 / 70	63	1,500	11,250	1,000	4,000	2.36 / 100	1.00	14.81	800	10 – 50	200	0.28	0.12	125	17	F-13
T507--80*4AQ	100 – 1600	80 / 70	125	2,100	22,050	1,400	8,150	1.88 / 100	0.95	9.87	800	10 – 50	200	0.28	0.12	125	17	F-13
T607--15*4BT	100 – 1600	150 / 70	235	6,000	180,000	4,000	65,000	1.47 / 100	1.25	1.67	800	10 – 50	300	0.13	0.08	125	19	F-14
T607--18*4BT	100 – 1600	175 / 70	275	6,750	227,813	4,500	84,000	1.28 / 100	1.13	1.23	800	10 – 50	300	0.13	0.08	125	19	F-14
T707--30*4BY	100 – 1600	300 / 70	475	12,000	720,000	8,000	265,000	1.45 / 800	1.05	0.53	800	25 – 60	300	0.10	0.05	125	21	F-14
T707--33*4BY	100 – 800	325 / 70	500	12,000	720,000	8,000	265,000	1.52 / 1000	1.17	0.32	800	10 – 50	300	0.10	0.05	125	21	F-14

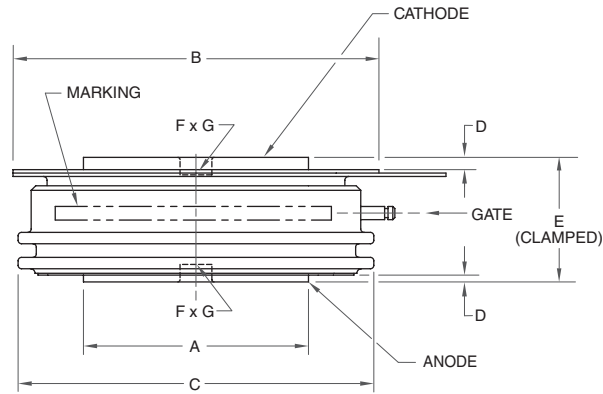
**1** T620, T625, T627



Dim.	Inches	Millimeters
A	0.752 Max.	19.1 Max.
B	1.6575 Dia.	42.1 Dia.
C	1.461 Dia.	37.1 Dia.
D	0.0197 Min.	0.5 Min.

Dim.	Inches	Millimeters
E	0.565 Max.	14.4 Max.
F	0.142 Dia.	3.6 Dia.
G	0.079 Deep	2.0 Deep

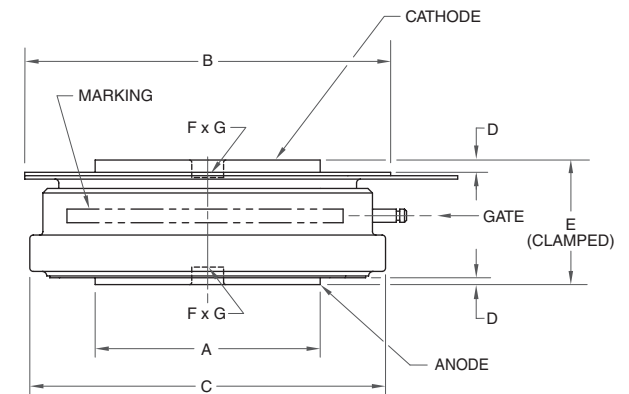
**2** T7H8, T7S7



Dim.	Inches	Millimeters
A	0.996 Dia.	25.3 Dia.
B	1.6496 Dia.	41.9 Dia.
C	1.5866 Dia.	40.3 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	0.606 Max.	15.4 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

**3** T7M8

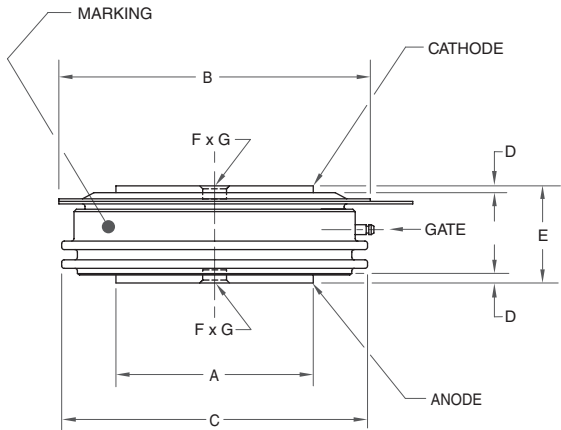


Dim.	Inches	Millimeters
A	0.996 Dia.	25.3 Dia.
B	1.6496 Dia.	41.9 Dia.
C	1.5866 Dia.	40.3 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	0.606 Max.	15.4 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep



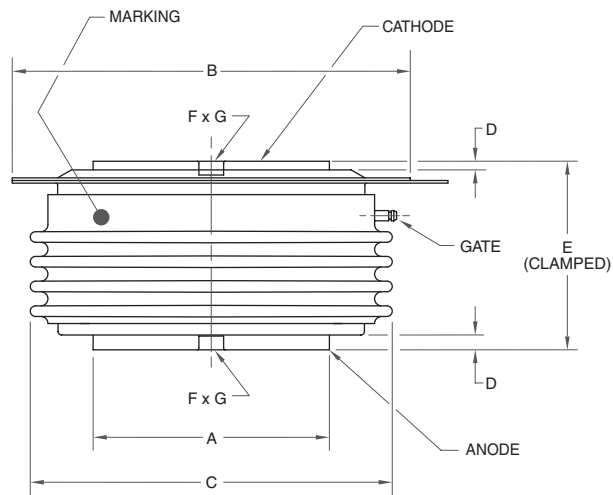
#### 4 T7SH, T7SO



Dim.	Inches	Millimeters
A	1.180 Dia.	29.97 Dia.
B	1.90 Dia.	48.26 Dia.
C	1.850 Dia.	46.99 Dia.
D	0.025 Min.	0.64 Min.

Dim.	Inches	Millimeters
E	0.605 Max.	15.37 Max.
F	0.145 Dia.	3.68 Dia.
G	0.082 Deep	2.08 Deep

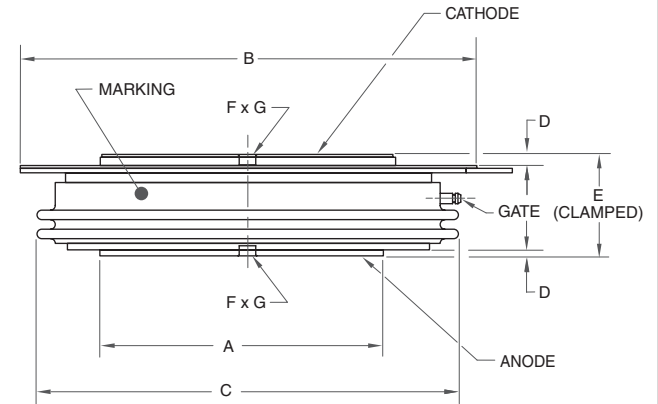
#### 5 T720, T72H, T727, T8KC, T8K7, T82F, T820



Dim.	Inches	Millimeters
A	1.34 Dia.	34.0 Dia.
B	2.28 Dia.	57.9 Dia.
C	2.05 Dia.	52.1 Dia.
D	0.03 Min.	0.76 Min.

Dim.	Inches	Millimeters
E	1.060 Max.	26.92 Max.
F	0.140 Dia.	3.56 Dia.
G	0.078 Deep	1.98 Deep

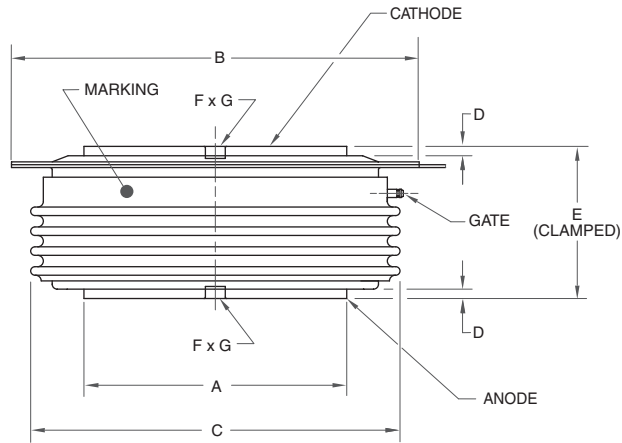
#### 6 T9S0



Dim.	Inches	Millimeters
A	1.85 Dia.	47.0 Dia.
B	2.91 Dia.	74.0 Dia.
C	2.64 Dia.	67.0 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	0.65 Max.	16.5 Max.
F	0.14 Dia.	3.5 Dia.
G	0.0787 Deep	2.0 Deep

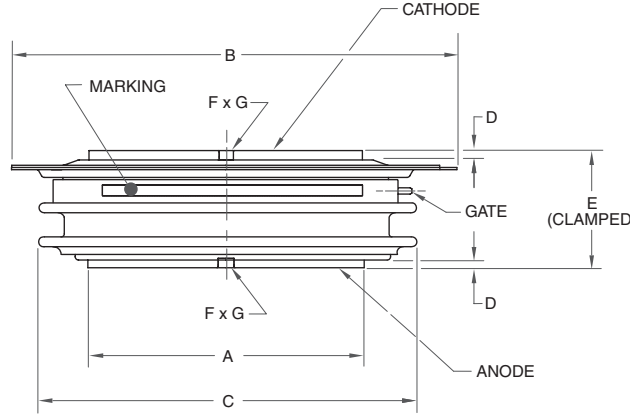
**7** C712, T9GH, T9G0, T9KC, T9K7



Dim.	Inches	Millimeters
A	1.858 Dia.	47.2 Dia.
B	2.902 Dia.	73.7 Dia.
C	2.642 Dia.	67.1 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	1.091 Max.	27.7 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

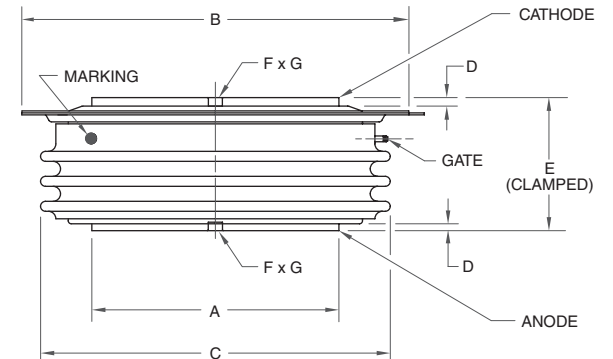
**8** TAS7, TAS0



Dim.	Inches	Millimeters
A	2.480 Dia.	63.0 Dia.
B	3.937 Dia.	100.0 Dia.
C	3.551 Dia.	90.2 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	1.03 Max.	26.162 Max.
F	0.14 Dia.	3.556 Dia.
G	0.0787 Deep	2.0 Deep

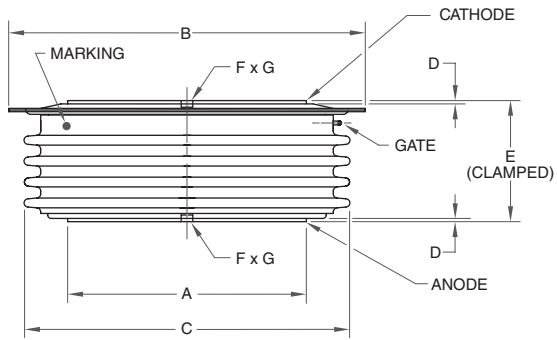
**9** TAK7, TA20



Dim.	Inches	Millimeters
A	2.480 Dia.	63.0 Dia.
B	3.937 Dia.	100.0 Dia.
C	3.551 Dia.	90.2 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	1.362 Max.	34.6 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

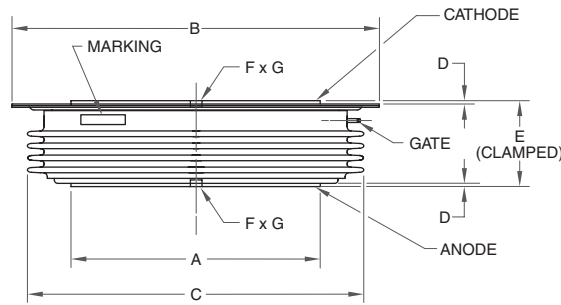
# 10 C770, TBKC, TBKD, TBK5, TBK7



Dim.	Inches	Millimeters
A	2.882 Dia.	73.2 Dia.
B	4.36 Dia.	110.7 Dia.
C	3.961 Dia.	100.6 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	1.5 Max.	38.1 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

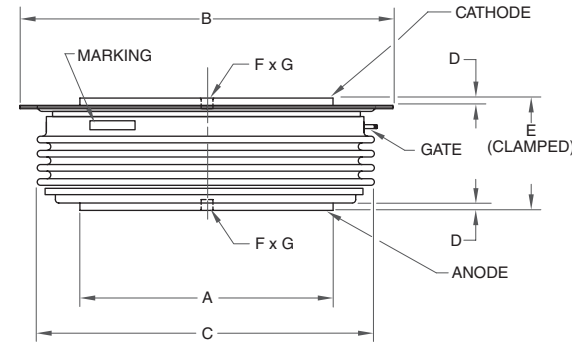
# 11 TBS4, TBS7, TBSX



Dim.	Inches	Millimeters
A	2.88 Dia.	73.2 Dia.
B	4.36 Dia.	110.7 Dia.
C	3.95 Dia.	100.3 Dia.
D	0.03 Min.	0.76 Min.

Dim.	Inches	Millimeters
E	1.05 Max.	26.67 Max.
F	0.14 Dia.	3.56 Dia.
G	0.08 Deep	2.03 Deep

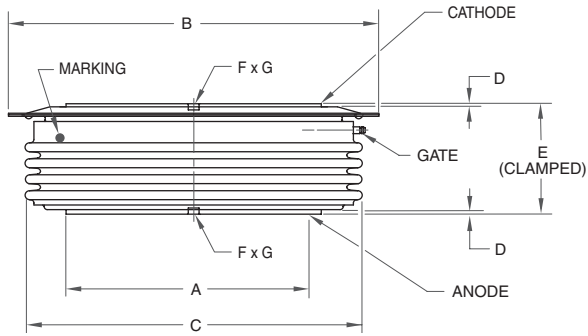
# 12 TCU4



Dim.	Inches	Millimeters
A	3.11 Dia.	84.1 Dia.
B	4.72 Dia.	120.0 Dia.
C	4.37 Dia.	111.0 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	1.03 Max.	26.2 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

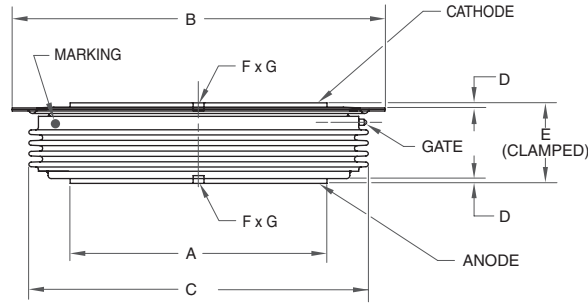
# 13 TC20



Dim.	Inches	Millimeters
A	3.11 Dia.	84.1 Dia.
B	4.8898 Dia.	124.2 Dia.
C	4.37 Dia.	111.0 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	1.5 Max.	38.1 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

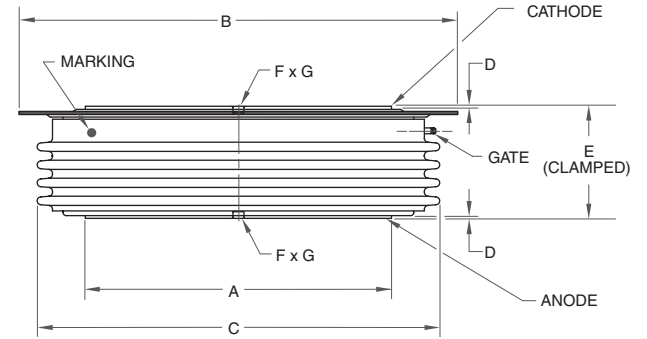
# 14 TCS4



Dim.	Inches	Millimeters
A	3.311 Dia.	84.1 Dia.
B	4.889 Dia.	124.2 Dia.
C	4.370 Dia.	111.0 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	1.059 Max.	26.9 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

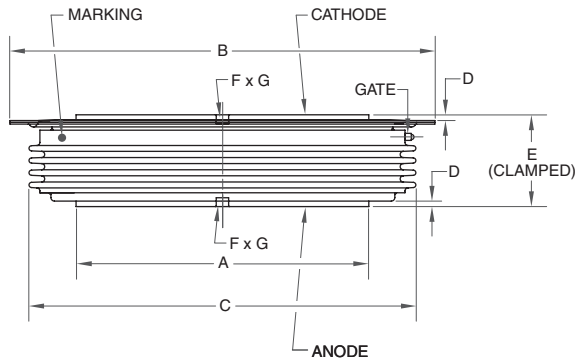
# 15 TDK4



Dim.	Inches	Millimeters
A	3.913 Dia.	99.4 Dia.
B	5.661 Dia.	143.8 Dia.
C	5.181 Dia.	131.6 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	1.5 Max.	38.1 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

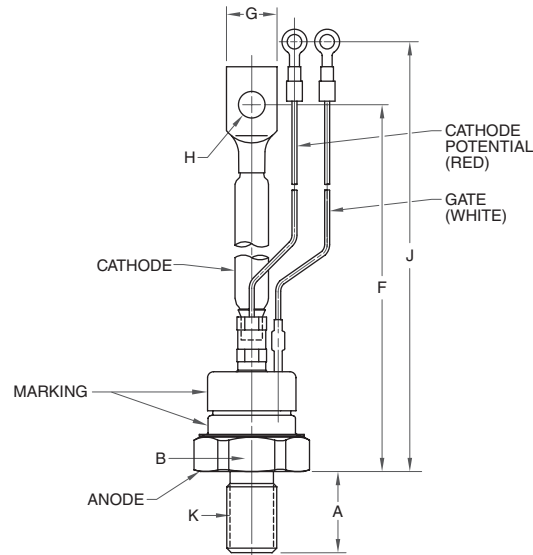
# 16 TDS4, TDS5



Dim.	Inches	Millimeters
A	3.913 Dia.	99.4 Dia.
B	5.661 Dia.	143.8 Dia.
C	5.181 Dia.	131.6 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	1.059 Max.	26.9 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

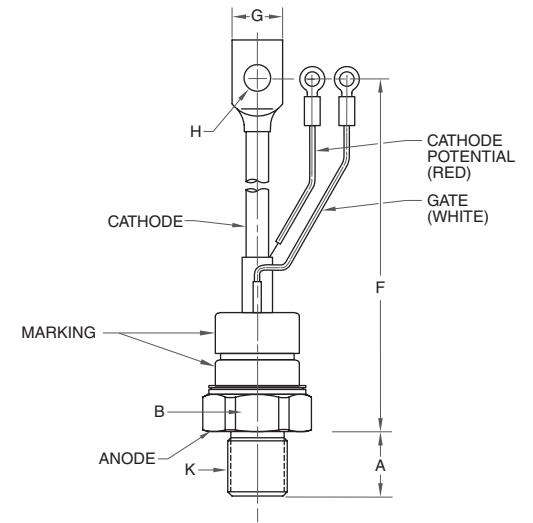
# 17 T500, T507



Dim.	Inches	Millimeters
A	0.815 Max.	20.7 Max.
B	1.059 Max.	26.9 Max.
F	6.240 Max.	158.5 Max.

Dim.	Inches	Millimeters
G	0.512 Max.	13.0 Max.
H	0.268 Dia.	6.8 Dia.
J	7.559 Max.	192.0 Max.
K	0.500-20 UNF-2A Thread	

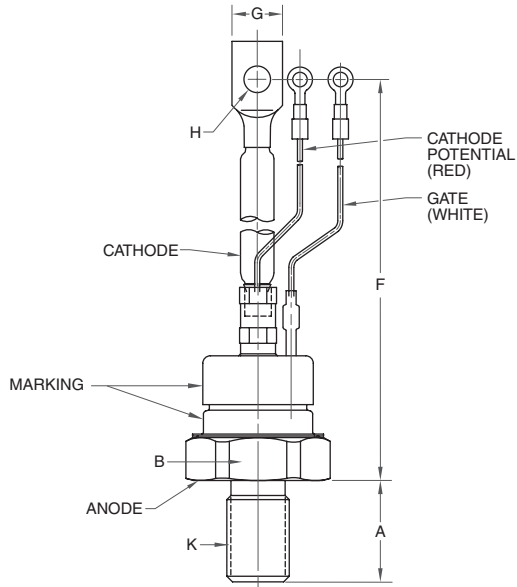
# 18 T650



Dim.	Inches	Millimeters
A	0.822 Max.	20.88 Max.
B	1.248 Max.	31.78 Max.
F	8.03 Max.	203.96 Max.

Dim.	Inches	Millimeters
G	0.63 Max.	16.0 Max.
H	0.281 Dia.	7.14 Dia.
K		M20 x 1.5

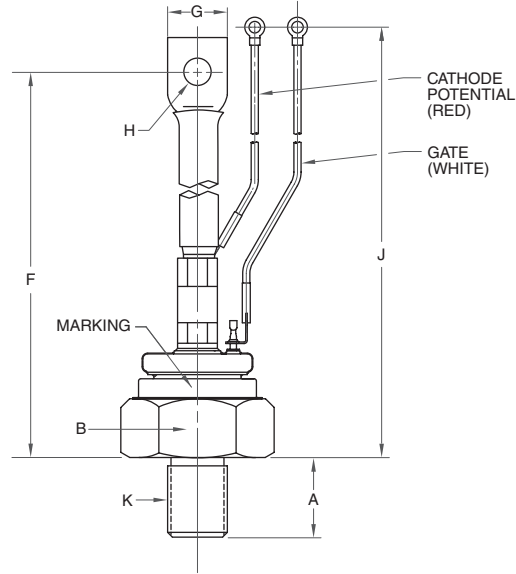
# 19 T600, T607



Dim.	Inches	Millimeters
A	1.063 Max.	27.0 Max.
B	1.252 Max.	31.8 Max.
	(Across Flats)	
F	8.032 Max.	204.0 Max.

Dim.	Inches	Millimeters
G	0.63 Max.	16.0 Max.
H	0.2795 Dia.	7.1 Dia.
K	0.75-16 UNF-2A Thread	

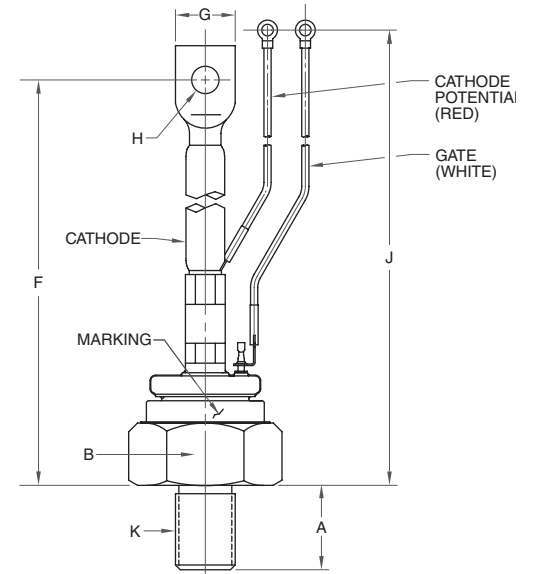
# 20 T750



Dim.	Inches	Millimeters
A	1.08 Max.	27.4 Max.
B	1.748 Max.	44.4 Max.
	(Across Flats)	
F	9.78 Max.	248.4 Max.

Dim.	Inches	Millimeters
G	0.847 Max.	21.5 Max.
H	0.355 Dia.	9.0 Dia.
J	10.18 Max.	258.5 Max.
K	M24 x 1.5	

# 21 T700, T707



Dim.	Inches	Millimeters
A	1.083 Max.	27.5 Max.
B	1.750 Max.	44.45 Max.
	(Across Flats)	
F	9.784 Max.	248.5 Max.

Dim.	Inches	Millimeters
G	0.756 Max.	19.2 Max.
H	0.343 Dia.	8.7 Dia.
J	10.181 Max.	258.6 Max.
K	0.750-16 UNF-2A Thread	

# DISCRETE RECTIFIERS

## General Purpose Rectifiers

### Applications Include:

- Battery Chargers
- Induction Heating/Melting
- Motor Controls
- Power Supplies
- Transportation
- Welding

## Fast Recovery Rectifiers

### Applications Include:

- Induction Heating
- Medical Equipment
- Motor Controls
- Transportation
- Welding

### Packages:

- Discrete Discs
- Discrete Studs

### Features:

- Nickel Plating Finish
- Hermetic Encapsulation for Long-Term Reliability to  $1 \times 10^{-6}$  cc/He/sec

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### General Purpose:

**VOLTAGE: 100V TO 6500V**  
**CURRENT: 100A TO 12,000A**

### Fast Recovery:

**VOLTAGE: 200V TO 3600V**  
**CURRENT: 125A TO 1500A**

## Numbering System

R5001210XXWA is a 100 Ampere, 1200 Volt,  
General Purpose Diode (STUD)

**R500 12 10 XX WA**

(1) (2) (3) (4) (5)

R6031225HSYA is a 250 Ampere, 1200 Volt,  
Fast Recovery Diode (STUD)

**R603 12 25 HS YA**

(1) (2) (3) (4) (5)

R6201250XXOO is a 500 Ampere, 1200 Volt,  
General Purpose Diode (DISC)

**R620 12 50 XX OO**

(1) (2) (3) (4) (5)

R6221240HSOO is a 400 Ampere, 1200 Volt,  
Fast Recovery Diode (DISC)

**R622 12 40 HS OO**

(1) (2) (3) (4) (5)


(1) Type Number	(4) Reverse Recovery Time				(5) Lead Code		
(2) Voltage Rating (x 100)	Code	Time (μsec)	Code	Time (μsec)	Device	Code	Description
(3) Current Rating: R5, R6 (x 10) R7, R8, R9, RA, RB (x 100)	XX	Standard Recovery	LS	0.7	R50* Stud	WA	Power Lead: 4.48" from seating plane to center of 0.281" diameter hole in terminal lug
	AS	5.0	MS	0.6	R60* Stud	YA	Power Lead: 5.44" from seating plane to center of 0.343" diameter hole in terminal lug
	BS	4.0	NS	0.2			
	CS	3.0	OS	4.5	R70* Stud	UA	Power Lead: 9.66" from seating plane to center of 0.343" diameter hole in terminal lug (Note: High voltage R7 studs with convoluted seal will be 9.96" from seating plane to center of 0.343" diameter hole in terminal lug)
	DS	2.5	PS	0.5			
	ES	2.0	QS	0.4			
	FS	1.5	RS	0.3			
	GS	1.25	TS	3.5			
	HS	1.0	US	2.75			
	IS	5.5	VS	2.25			
	JS	0.9	ZS	10.0			
	KS	0.8					




**General Purpose Disc/Hockey Puk Diodes** (Refer to device datasheets at [www.pwr.com](http://www.pwr.com) for test conditions.)

Type	EUROPEAN			NORTH AMERICAN				$V_{FM}/I_{FM}$ Volts/Amperes ( $T_j(\max)$ )	$V_{TO}$ Volts ( $T_j(\max)$ )	$R_T$ m $\Omega$ ( $T_j(\max)$ )	$R_{th(j-c)}$ °C/W	$R_{th(c-s)}$ °C/W	$T_j(\max)$ °C	Outline Drawings	
	$V_{RRM}$ Volts ( $V_{RMS} = V_{RRM} + 100V$ )	$I_{F(av)}/T_C$ Amperes/°C (180° sin)	$I_{F(RMS)}$ Amperes (180° sin)	$I_{FSM}$ Amperes (10ms, $T_j(\max)$ , No $V_{RRM}$ Reapplied)	$I^2t$ A <sup>2</sup> sec (10ms, $T_j(\max)$ , No $V_{RRM}$ Reapplied)	$I_{FSM}$ Amperes (8.3ms, $T_j(\max)$ , 100% $V_{RRM}$ Reapplied)	$I^2t$ A <sup>2</sup> sec (8.3ms, $T_j(\max)$ , 100% $V_{RRM}$ Reapplied)							Number	Page
<b>Up to 1200V</b>															
RA20--48XX	200 – 1200	4800 / 98	7,535	73,500	27.0 x 10 <sup>6</sup>	49,000	10.0 x 10 <sup>6</sup>	0.71 / 1000	0.65128	0.06315	0.013	0.001	190	7	G-9
RBS8--70XX	200 – 600	7000 / 79	11,000	90,000	40.5 x 10 <sup>6</sup>	60,000	1.5 x 10 <sup>6</sup>	0.70 / 1000	0.64564	0.04421	0.0095	0.002	175	9	G-9
RDS8--10XX	200 – 1200	10,000 / 90	15,708	111,000	5.13 x 10 <sup>7</sup>	120,000	6.00 x 10 <sup>7</sup>	0.75 / 4000	0.642	2.28 x 10 <sup>-4</sup>	0.0075	0.0015	175	12	G-10
<b>Up to 2000V</b>															
R7S0--08XX	200 – 1600	800 / 121	1,250	12,750	812,813	8,500	301,000	1.95 / 2000	0.91169	0.51788	0.035	0.02	175	2	G-7
R720--12XX	200 – 1600	1200 / 106	1,885	18,750	1.7 x 10 <sup>6</sup>	12,500	650,700	0.91 / 1000	0.68	0.24	0.055	0.02	175 – 200	4	G-8
R7S0--12XX	200 – 1600	1200 / 86	1,875	13,500	911,250	9,000	337,500	1.25 / 2000	0.831	0.441	0.035	0.02	175	2	G-7
R7S0--16XX	200 – 1600	1600 / 98	2,500	21,000	2.2 x 10 <sup>6</sup>	14,000	816,700	1.2 / 2000	0.62955	0.2929	0.035	0.02	200	2	G-7
R9G0--22XX	200 – 1600	2200 / 134	3,455	45,000	10.1 x 10 <sup>6</sup>	30,000	3.7 x 10 <sup>6</sup>	0.97 / 2000	0.79109	0.08773	0.020	0.0075	150	5	G-8
R9S0--30XX	600 – 1600	3000 / 115	4,710	45,000	10.1 x 10 <sup>6</sup>	30,000	3.7 x 10 <sup>6</sup>	1.10 / 1500	0.912	0.089	0.0145	0.006	175	6	G-8
RBK8--63XX	1200 – 1600	6300 / 100	9896	115,900	6.72 x 10 <sup>7</sup>	84,600	2.99 x 10 <sup>7</sup>	0.85 / 4000	0.688	0.0362	0.0115	0.002	190	10	G-10
RBS8--72XX	1200 – 1600	7200 / 84	11,310	115,900	6.72 x 10 <sup>7</sup>	84,600	2.99 x 10 <sup>7</sup>	0.90 / 4000	0.704	0.0479	0.0095	0.002	190	9	G-9
RCS8--80XX	200 – 1400	8000	12,566	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	175	11	G-10
<b>Up to 2600V</b>															
R620--30XX	200 – 2400	300 / 142	470	8,250	340,313	5,500	125,000	1.33 / 500	0.92	0.88	0.095	0.02	150 – 190	1	G-7
R620--40XX	200 – 2400	400 / 128	625	9,000	405,000	6,000	150,000	1.25 / 500	0.89	0.74	0.095	0.02	150 – 190	1	G-7
R620--50XX	200 – 2400	500 / 114	785	9,750	475,313	6,500	175,000	1.17 / 500	0.85	0.63	0.095	0.02	150 – 190	1	G-7
R7S0--08XX	1800 – 2400	800 / 121	1,250	12,750	812,813	8,500	301,000	1.95 / 2000	0.91169	0.51788	0.035	0.02	175	3	G-7
R720--09XX	200 – 2600	900 / 110	1,415	12,750	812,813	8,500	301,000	1.26 / 1000	0.84	0.42	0.055	0.02	150 – 200	4	G-8
R7S0--12XX	1800 – 2400	1200 / 86	1,875	13,500	911,250	9,000	337,500	1.25 / 2000	0.38717	0.4301	0.035	0.02	175	3	G-7
R820--16XX	200 – 2600	1600 / 82	2,513	12,950	6.99 x 10 <sup>5</sup>	14,000	8.17 x 10 <sup>5</sup>	1.06 / 1500	0.68	0.25	0.035	0.015	175	4	G-8
R9G0--18XX	200 – 2400	1800 / 110	2,825	32,250	5.2 x 10 <sup>6</sup>	21,500	1.9 x 10 <sup>6</sup>	1.25 / 2000	0.81366	0.2242	0.02	0.008	175	5	G-8
RA20--36XX	200 – 2400	3600 / 100	5,650	60,000	18.0 x 10 <sup>6</sup>	40,000	6.67 x 10 <sup>6</sup>	0.79 / 1000	0.66324	0.1134	0.013	0.007	175	7	G-9
RBK8--50XX	1800 – 2400	5000 / 90	7854	91,500	3.49 x 10 <sup>7</sup>	66,800	1.86 x 10 <sup>7</sup>	0.95 / 4000	0.661	0.0659	0.0115	0.002	175	10	G-10
RAS8--54XX	1600 – 2400	5450 / 90	8561	115,000	6.61 x 10 <sup>7</sup>	84,000	2.94 x 10 <sup>7</sup>	1.15 / 3000 ( $T_j = 25^\circ\text{C}$ )	0.734	0.0665	0.011	0.002	175	8	G-9
RBS8--56XX	1800 – 2400	5680 / 90	8922	103,700	4.48 x 10 <sup>7</sup>	75,700	2.39 x 10 <sup>7</sup>	0.95 / 4000	0.661	0.0659	0.0095	0.002	175	9	G-9
RDS8--80XX	200 – 2500	8000 / 90	12,566	150,000	3.57 x 10 <sup>7</sup>	100,000	4.17 x 10 <sup>7</sup>	0.82 / 4000	0.654	3.82 x 10 <sup>-2</sup>	0.007	0.001	175	12	G-10
<b>Up to 3200V</b>															
RBK8--40XX	200 – 3200	4000 / 82	6,280	75,000	28.1 x 10 <sup>6</sup>	50,000	10.4 x 10 <sup>6</sup>	0.78 / 1000	0.69989	0.09373	0.0115	0.002	160	10	G-10
RBS8--45XX	2200 – 3200	4500 / 94	7069	83,250	3.47 x 10 <sup>7</sup>	60,800	1.54 x 10 <sup>7</sup>	1.00 / 2000	0.786	0.0997	0.0095	0.002	175	9	G-9
RDK8--85XX	2400 – 3000	8500 / 90	13,352	92,500	4.28 x 10 <sup>7</sup>	67,500	1.90 x 10 <sup>7</sup>	0.82 / 4000	0.762	5.28 x 10 <sup>-2</sup>	0.0063	0.001	160	13	G-11
RDS8--90XX	1400 – 3000	9000	14,137	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0.0075	0.0015	175	12	G-10

## General Purpose Disc/Hockey Puk Diodes (Refer to device datasheets at [www.pwr.com](http://www.pwr.com) for test conditions.)

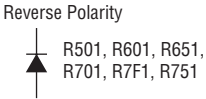
Type	 $V_{RRM}$ Volts ( $V_{RMS} = V_{RRM} + 100V$ )	$I_{F(av)/TC}$ Amperes/°C (180° sin)	$I_{F(RMS)}$ Amperes (180° sin)	EUROPEAN		NORTH AMERICAN		$V_{FM}/I_{FM}$ Volts/Amperes ( $T_j(max)$ )	$V_{TO}$ Volts ( $T_j(max)$ )	$R_T$ mΩ ( $T_j(max)$ )	$R_{th(j-c)}$ °C/W	$R_{th(c-s)}$ °C/W	$T_{j(max)}$ °C	Outline Drawings		
				$I_{FSM}$ Amperes (10ms, $T_{j(max)}$ , No $V_{RRM}$ Reapplied)	$I^2t$ A <sup>2</sup> sec (10ms, $T_{j(max)}$ , No $V_{RRM}$ Reapplied)	$I_{FSM}$ Amperes (8.3ms, $T_{j(max)}$ , 100% $V_{RRM}$ Reapplied)	$I^2t$ A <sup>2</sup> sec (8.3ms, $T_{j(max)}$ , 100% $V_{RRM}$ Reapplied)							Number	Page	
<b>Up to 6500V</b>																
R720--06XX	200 – 4400	600 / 136	945	10,500	551,250	7,000	204,000	1.54 / 1000	0.92	0.61	0.055	0.02	150 – 200	4	G-8	
R8K8--06XX	6000 – 6500	600 / 100	942	7,300	$2.66 \times 10^5$	5,300	$1.19 \times 10^5$	1.80 / 800 ( $T_j = 25^\circ C$ )	0.77	1.08	0.035	0.015	150	4	G-8	
R820--07XX	4400 – 5200	690 / 100	1,084	6,938	$2.41 \times 10^5$	7,500	$2.34 \times 10^5$	1.94 / 1500	1.0	0.62	0.035	0.015	150	4	G-8	
R9G0--12XX	200 – 5400	1200 / 102	1,880	24,000	$2.8 \times 10^6$	16,000	$1.1 \times 10^6$	1.4 / 1000	1.07197	0.32357	0.020	0.008	150	5	G-8	
R9G0--14XX	6000 – 6500	1360 / 80	2,136	15,250	$1.6 \times 10^6$	12,500	$6.51 \times 10^6$	1.61 / 1500	0.793	0.521	0.20	0.0006	150	5	G-8	
RA20--20XX	200 – 5400	2000 / 99	3,140	36,000	$6.4 \times 10^6$	24,000	$2.4 \times 10^6$	1.39 / 2000	0.96347	0.20721	0.013	0.007	150	7	G-9	
RA20--25XX	200 – 4200	2500 / 100	3,920	42,000	$8.8 \times 10^6$	28,000	$3.2 \times 10^6$	0.87 / 1000	0.74116	0.1320	0.013	0.001	150	7	G-9	
RBK8--25XX	5600 – 6500	2500 / 85	3927	61,000	$1.86 \times 10^7$	44,500	$8.28 \times 10^6$	1.55 / 3000 ( $T_j = 25^\circ C$ )	0.79	0.238	0.0115	0.002	150	10	G-10	
RBT8--28XX	5600 – 6500	2850 / 85	4477	61,000	$1.86 \times 10^7$	44,500	$8.28 \times 10^6$	1.55 / 3000	0.79	0.238	0.0095	0.002	150	9	G-9	
RDK8--40XX	6000 – 6500	4000 / 68	6,283	55,000	$1.28 \times 10^7$	60,000	$1.50 \times 10^7$	1.65 / 4000	1.13	$0.117 \times 10^{-4}$	0.0075	0.001	150	13	G-11	

## General Purpose Welding Diodes (Refer to device datasheets at [www.pwr.com](http://www.pwr.com) for test conditions.)

Type	 $V_{RRM}$ Volts ( $V_{RMS} = V_{RRM} + 100V$ )	$I_{F(av)/TC}$ Amperes/°C (180° sin)	$I_{F(RMS)}$ Amperes (180° sin)	EUROPEAN		NORTH AMERICAN		$V_{FM}/I_{FM}$ Volts/Amperes ( $T_j(max)$ @25°C)	$V_{TO}$ Volts ( $T_j(max)$ )	$R_T$ mΩ ( $T_j(max)$ )	$R_{th(j-c)}$ °C/W	$R_{th(c-s)}$ °C/W	$T_{j(max)}$ °C	Outline Drawings	
				$I_{FSM}$ Amperes (10ms, $T_{j(max)}$ , No $V_{RRM}$ Reapplied)	$I^2t$ A <sup>2</sup> sec (10ms, $T_{j(max)}$ , No $V_{RRM}$ Reapplied)	$I_{FSM}$ Amperes (8.3ms, $T_{j(max)}$ , 100% $V_{RRM}$ Reapplied)	$I^2t$ A <sup>2</sup> sec (8.3ms, $T_{j(max)}$ , 100% $V_{RRM}$ Reapplied)							Number	Page
R9XSMD0448XX	400	4800 / 84	7540	33,600	$5.64 \times 10^6$	35,000	$5.10 \times 10^6$	1.20 / 4000	0.701	0.053	0.009	0.005	175	20	G-13
R9XSMD0463XX	400	6300 / 40	9,896	33,600	$5.64 \times 10^6$	35,000	$5.10 \times 10^6$	1.10 / 4000	0.701	0.053	0.009	0.005	175	20	G-13
R9XSMD0475XX	400	7450 / 40	11,702	42,000	$8.82 \times 10^6$	43,700	$7.96 \times 10^6$	1.05 / 4000	0.720	0.0308	0.009	0.005	175	21	G-13
RAXMHC0412XX	400	12,000 / 79	18,850	57,300	$1.64 \times 10^7$	60,000	$1.50 \times 10^7$	0.95 / 4000	0.977	0.00915	0.005	0.003	175	22	G-14
RAS00412XX	400	12,000 / 68	18,850	57,300	$1.64 \times 10^7$	60,000	$1.50 \times 10^7$	1.00 / 4000	0.98	$4.91 \times 10^{-3}$	0.008	0.004	175	8	G-9

**General Purpose Stud Diodes** (Refer to device datasheets at [www.pwr.com](http://www.pwr.com) for test conditions.)

Type	V <sub>RRM</sub> Volts (V <sub>RMS</sub> = V <sub>RRM</sub> + 100V)	I <sub>F(av)</sub> /T <sub>C</sub> Amperes/°C (180° sin)	I <sub>F(RMS)</sub> Amperes (180° sin)	EUROPEAN		NORTH AMERICAN		V <sub>FM</sub> /I <sub>FM</sub> Volts/Amperes (T <sub>j(max)</sub> )	V <sub>T0</sub> Volts (T <sub>j(max)</sub> )	R <sub>T</sub> mΩ (T <sub>j(max)</sub> )	R <sub>th(j-c)</sub> °C/W	R <sub>th(c-s)</sub> °C/W	T <sub>j(max)</sub> °C	Outline Drawings	
				I <sub>FSM</sub> Amperes (10ms, T <sub>j(max)</sub> ; No V <sub>RRM</sub> Reapplied)	I <sup>2</sup> t A <sup>2</sup> sec (10ms, T <sub>j(max)</sub> ; No V <sub>RRM</sub> Reapplied)	I <sub>FSM</sub> Amperes (8.3ms, T <sub>j(max)</sub> ; 100% V <sub>RRM</sub> Reapplied)	I <sup>2</sup> t A <sup>2</sup> sec (8.3ms, T <sub>j(max)</sub> ; 100% V <sub>RRM</sub> Reapplied)							Number	Page
<b>Up to 1600V</b>															
R500--10XXWA, R501--10XXWA	200 – 1600	100 / 163	160	3,450	59,513	2,300	22,000	1.0 / 80	0.80	1.99	0.28	0.20	200	14	G-11
R500--15XXWA, R501--15XXWA	200 – 1600	150 / 147	236	4,500	101,250	3,000	37,500	1.0 / 100	0.85	1.08	0.28	0.20	200	14	G-11
R700--05XXUA, R701--05XXUA	200 – 1600	550 / 125	865	15,000	1.1 x 10 <sup>6</sup>	10,000	416,500	0.89 / 1000	0.65	0.25	0.12	0.04	200	17	G-12
R750--05XXUA, R751--05XXUA	200 – 1600	550 / 125	865	15,000	1.1 x 10 <sup>6</sup>	10,000	416,500	0.89 / 1000	0.65	0.25	0.12	0.04	200	19	G-13
<b>Up to 2600V</b>															
R600--20XXYA, R601--20XXYA	100 – 2600	200 / 140	315	8,250	340,313	5,500	125,000	1.32 / 500	0.84	0.94	0.18	0.10	150 – 190	15	G-11
R650--20XXYA, R651--20XXYA	100 – 2600	200 / 140	315	8,250	340,313	5,500	125,000	1.32 / 500	0.84	0.94	0.18	0.10	150 – 190	16	G-12
R600--25XXYA, R601--25XXYA	100 – 2600	250 / 130	400	9,000	405,000	6,000	150,000	1.24 / 500	0.88	0.72	0.18	0.10	150 – 190	15	G-11
R650--25XXYA, R651--25XXYA	100 – 2600	250 / 130	400	9,000	405,000	6,000	150,000	1.24 / 500	0.88	0.72	0.18	0.10	150 – 190	16	G-12
R600--30XXYA, R601--30XXYA	100 – 2600	300 / 123	470	9,750	475,313	6,500	175,000	1.17 / 500	0.92	0.53	0.18	0.10	150 – 190	15	G-11
R650--30XXYA, R651--30XXYA	100 – 2600	300 / 123	470	9,750	475,313	6,500	175,000	1.17 / 500	0.92	0.53	0.18	0.10	150 – 190	16	G-12
R700--04XXUA, R701--04XXUA	200 – 2600	450 / 100	700	12,750	812,813	8,500	266,000	1.25 / 1000	0.83	0.40	0.12	0.04	200	17	G-12
R750--04XXUA, R751--04XXUA	200 – 2600	450 / 100	700	12,750	812,813	8,500	266,000	1.25 / 1000	0.83	0.40	0.12	0.04	200	19	G-13
<b>Up to 4500V</b>															
R700--03XXUA, R701--03XXUA	200 – 4400	300 / 80	470	10,500	551,250	7,000	204,000	1.48 / 1000	0.92	0.55	0.12	0.04	200	17	G-12
R750--03XXUA, R751--03XXUA	200 – 4400	300 / 80	470	10,500	551,250	7,000	204,000	1.48 / 1000	0.92	0.55	0.12	0.04	200	19	G-13
R7F0--03XXUA, R7F1--03XXUA	200 – 4400	300 / 80	470	10,500	551,250	7,000	204,000	1.48 / 1000	0.92	0.55	0.12	0.04	200	18	G-12



## Fast Recovery Disc/Hockey Puk Diodes (Refer to device datasheets at [www.pwr.com](http://www.pwr.com) for test conditions.)

Type	$V_{RRM}$ Volts ( $V_{RMS} = V_{RRM} + 100V$ )	$I_{F(av)/TC}$ Amperes/°C (180° sin)	$I_{F(RMS)}$ Amperes (180° sin)	EUROPEAN		NORTH AMERICAN		$V_{FM}/I_{FM}$ Volts/Amperes ( $T_j(max)$ )	$V_{T0}$ Volts ( $T_j(max)$ )	$R_T$ mΩ ( $T_j(max)$ )	$R_{th(j-c)}$ °C/W	$R_{th(c-s)}$ °C/W	$T_j(max)$ °C	Outline Drawings	
				$I_{FSM}$ Amperes (10ms, $T_j(max)$ , No $V_{RRM}$ Reapplied)	$i^2t$ A <sup>2</sup> sec (10ms, $T_j(max)$ , No $V_{RRM}$ Reapplied)	$I_{FSM}$ Amperes (8.3ms, $T_j(max)$ , No $V_{RRM}$ Reapplied)	$i^2t$ A <sup>2</sup> sec (8.3ms, $T_j(max)$ , No $V_{RRM}$ Reapplied)							Number	Page
<b>Up to 1600V</b>															
R622--40*S00	200 – 1600	400 / 70	625	6,750	227,813	4,500	85,000	1.40 / 200	1.23	0.84	0.095	0.025	150	1	G-7
R622--55*S00	200 – 1600	550 / 70	860	9,000	405,000	6,000	150,000	1.29 / 700	0.97	0.44	0.095	0.025	150	1	G-7
R722--06*S00	200 – 1600	650 / 70	1000	11,250	632,813	7,500	234,000	1.51 / 400	1.12	0.67	0.055	0.020	150	4	G-8
R722--08*S00	200 – 1600	800 / 70	1,250	16,500	1.3 x 10 <sup>6</sup>	11,000	504,000	1.22 / 400	1.08	0.36	0.055	0.020	150	4	G-8
R7S2--09*S00	200 – 1600	900 / 70	1,440	11,250	632,813	7,500	234,000	1.55 / 500	1.32	0.44	0.035	0.025	150	3	G-7
R7S2--10*S00	200 – 1600	1000 / 70	1,550	16,500	1,361,250	11,000	504,000	1.24 / 500	1.05	0.37	0.035	0.025	150	3	G-7
<b>Up to 2600V</b>															
R722--05*S00	200 – 2600	500 / 70	785	9,750	475,313	6,500	176,000	1.52 / 500	0.99	0.86	0.055	0.020	150	4	G-8
R722--07*S00	200 – 2600	700 / 70	1100	14,250	1.01 x 10 <sup>6</sup>	9,500	376,000	1.0 / 300	0.87	0.57	0.055	0.020	150	4	G-8
R7S2--07*S00	200 – 2600	700 / 70	1100	9,750	475,313	6,500	176,000	1.42 / 400	1.10	0.72	0.035	0.025	150	3	G-7
R7S2--08*S00	200 – 2600	800 / 70	1,250	14,250	1.01 x 10 <sup>6</sup>	9,500	376,000	1.17 / 500	0.86	0.55	0.035	0.025	150	3	G-7
<b>Up to 3600V</b>															
R9G2--12*S00	200 – 3600	1200 / 70	1,900	21,000	2.2 x 10 <sup>6</sup>	14,000	820,000	1.95 / 1000	1.18	0.62	0.018	0.008	150	5	G-8
R9G2--15*S00	200 – 3600	1500 / 70	2,350	27,000	3.6 x 10 <sup>6</sup>	18,000	1.35 x 10 <sup>6</sup>	1.5 / 1000	1.04	0.39	0.018	0.008	150	5	G-8

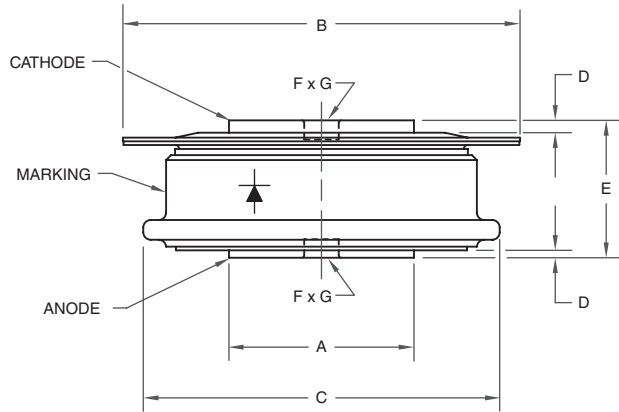
## Fast Recovery Stud Diodes (Refer to device datasheets at [www.pwr.com](http://www.pwr.com) for test conditions.)

Type	$V_{RRM}$ Volts ( $V_{RMS} = V_{RRM} + 100V$ )	$I_{F(av)/TC}$ Amperes/°C (180° sin)	$I_{F(RMS)}$ Amperes (180° sin)	EUROPEAN		NORTH AMERICAN		$V_{FM}/I_{FM}$ Volts/Amperes ( $T_j(max)$ )	$V_{T0}$ Volts ( $T_j(max)$ )	$R_T$ mΩ ( $T_j(max)$ )	$R_{th(j-c)}$ °C/W	$R_{th(c-s)}$ °C/W	$T_j(max)$ °C	Outline Drawings	
				$I_{FSM}$ Amperes (10ms, $T_j(max)$ , No $V_{RRM}$ Reapplied)	$i^2t$ A <sup>2</sup> sec (10ms, $T_j(max)$ , No $V_{RRM}$ Reapplied)	$I_{FSM}$ Amperes (8.3ms, $T_j(max)$ , No $V_{RRM}$ Reapplied)	$i^2t$ A <sup>2</sup> sec (8.3ms, $T_j(max)$ , No $V_{RRM}$ Reapplied)							Number	Page
<b>Up to 1600V</b>															
R502--13*SWA, R503--13*SWA	200 – 1400	125 / 70	195	3,750	70,313	2,500	26,000	1.84 / 200	1.17	3.09	0.28	0.12	150	14	G-11
R502--18*SWA, R503--18*SWA	200 – 1400	175 / 70	275	5,250	137,813	3,500	51,000	1.48 / 300	0.85	1.57	0.28	0.12	150	14	G-11
R602--25*SYA, R603--25*SYA	200 – 1600	250 / 70	400	6,750	227,813	4,500	85,000	1.39 / 200	1.20	0.86	0.17	0.10	150	15	G-11
R602--35*SYA, R603--35*SYA	200 – 1600	350 / 70	550	9,000	405,000	6,000	150,000	1.18 / 400	0.95	0.51	0.17	0.10	150	15	G-11

Forward Polarity  
 R502, R602

Reverse Polarity  
 R503, R603

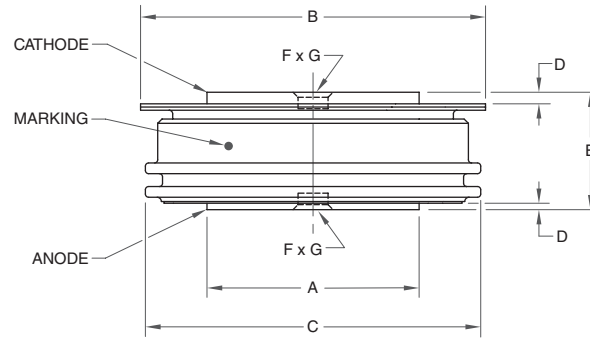
# 1 R620, R622



Dim.	Inches	Millimeters
A	0.752 Dia.	19.1 Dia.
B	1.658 Dia.	42.1 Dia.
C	1.461 Dia.	37.1 Dia.
D	0.0197 Min.	0.5 Min.

Dim.	Inches	Millimeters
E	0.567 Max.	14.4 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

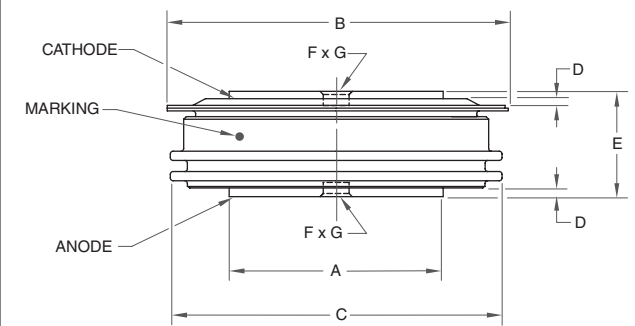
# 2 R7S0 (≤1600V)



Dim.	Inches	Millimeters
A	0.995 Dia.	25.27 Dia.
B	1.650 Dia.	41.9 Dia.
C	1.585 Dia.	40.26 Dia.
D	0.040 Min.	1.01 Min.

Dim.	Inches	Millimeters
E	0.605 Max.	15.37 Max.
F	0.145 Dia.	3.68 Dia.
G	0.0787 Deep	2.0 Deep

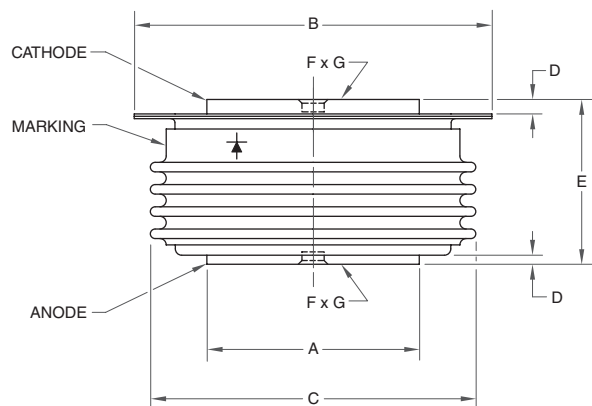
# 3 R7S0 (≥1800V), R7S2



Dim.	Inches	Millimeters
A	1.17 Dia.	29.7 Dia.
B	1.90 Dia.	48.3 Dia.
C	1.85 Dia.	47.0 Dia.
D	0.028 Min.	0.7 Min.

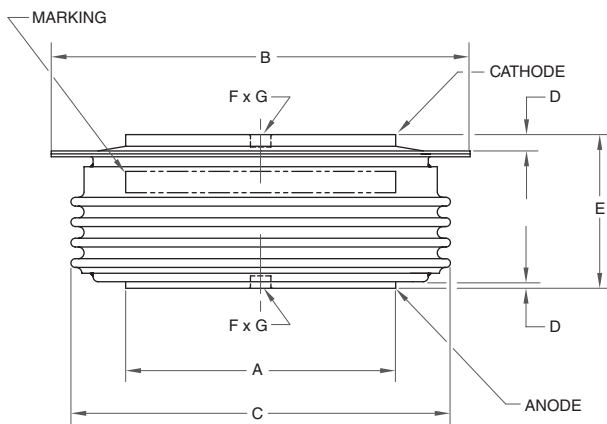
Dim.	Inches	Millimeters
E	0.606 Max.	15.4 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

## 4 R720, R722, R820, R8K8



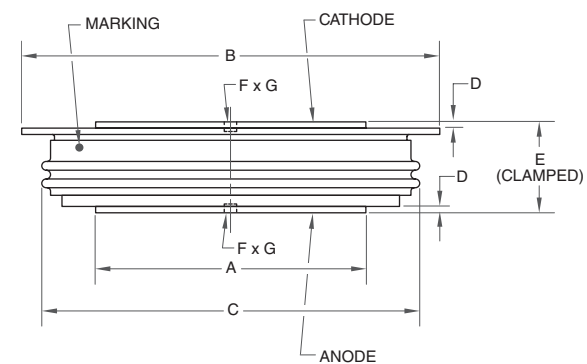
Dim.	Inches	Millimeters
A	1.343 Dia.	34.1 Dia.
B	2.299 Dia.	58.4 Dia.
C	2.091 Dia.	53.1 Dia.
D	0.028 Min.	0.7 Min.

## 5 R9G0, R9G2



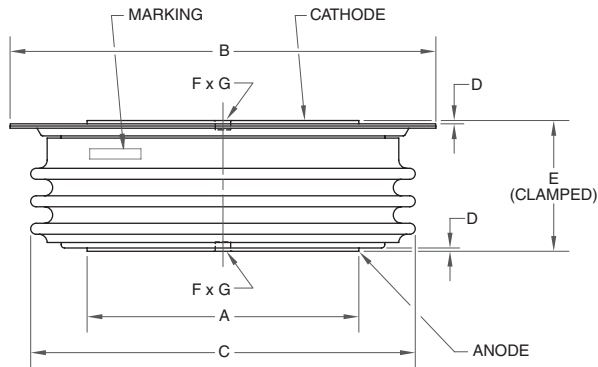
Dim.	Inches	Millimeters
A	1.858 Dia.	47.2 Dia.
B	2.8898 Dia.	73.4 Dia.
C	2.6496 Dia.	67.3 Dia.
D	0.028 Min.	0.7 Min.

## 6 R9S0



Dim.	Inches	Millimeters
A	1.85 Dia.	47.0 Dia.
B	2.913 Dia.	74.0 Dia.
C	2.638 Dia.	67 Dia.
D	0.028 Min.	0.7 Min.
E	0.650 Max.	16.5 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

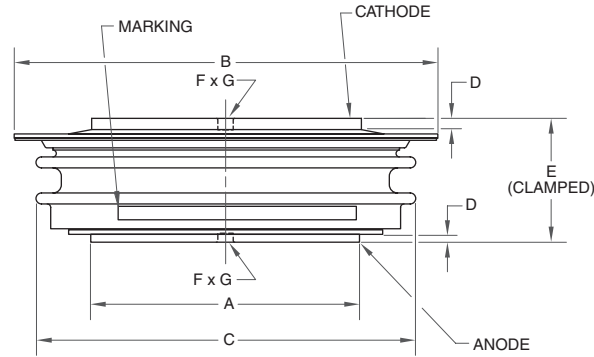
# 7 RA20



Dim.	Inches	Millimeters
A	2.469 Dia.	62.7 Dia.
B	3.909 Dia.	99.3 Dia.
C	3.543 Dia.	90.0 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	1.339 Max.	34.0 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

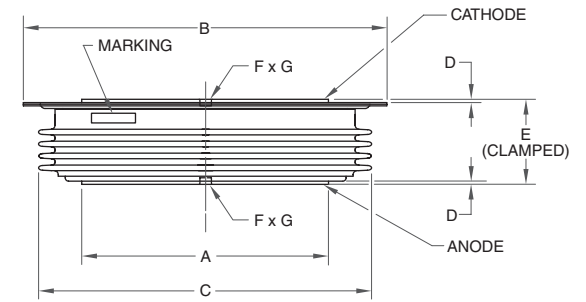
# 8 RAS8, RAS00412XX



Dim.	Inches	Millimeters
A	2.48 Dia.	63.0 Dia.
B	3.93 Dia.	100.0 Dia.
C	3.543 Dia.	91.0 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	1.031 Max.	26.2 Max.
F	0.14 Dia.	3.5 Dia.
G	0.07 Deep	1.8 Deep

# 9 RBS8, RBT8



## RBS8

Dim.	Inches	Millimeters
A	2.88 Dia.	73.2 Dia.
B	4.36 Dia.	110.7 Dia.
C	3.95 Dia.	100.3 Dia.
D	0.03 Min.	0.76 Min.

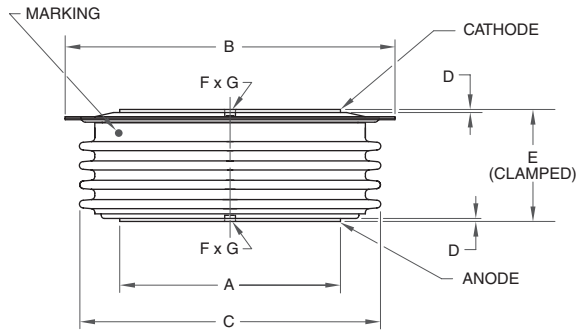
Dim.	Inches	Millimeters
E	1.08 Max.	27.4 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

## RBT8

Dim.	Inches	Millimeters
A	2.88 Dia.	73.2 Dia.
B	4.36 Dia.	110.7 Dia.
C	3.95 Dia.	100.3 Dia.
D	0.03 Min.	0.76 Min.

Dim.	Inches	Millimeters
E	1.04 Max.	26.5 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

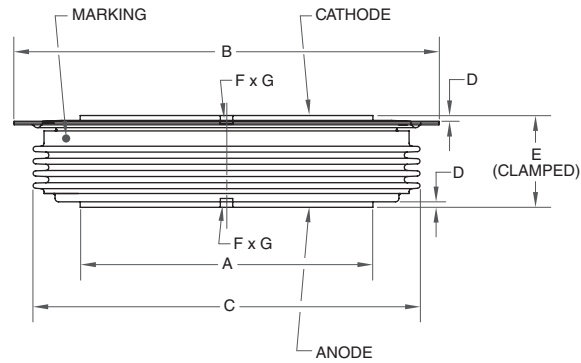
## 10 RBK8



Dim.	Inches	Millimeters
A	2.882 Dia.	73.2 Dia.
B	4.36 Dia.	110.7 Dia.
C	3.961 Dia.	100.6 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	1.5 Max.	38.1 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

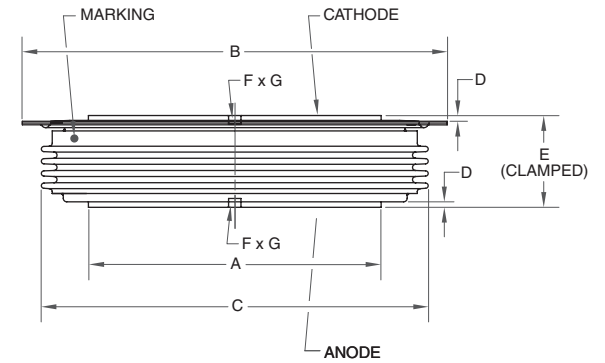
## 11 RCS8



Dim.	Inches	Millimeters
A	3.311 Dia.	84.1 Dia.
B	4.889 Dia.	124.2 Dia.
C	4.370 Dia.	111.0 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	1.059 Max.	26.9 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

## 12 RDS8

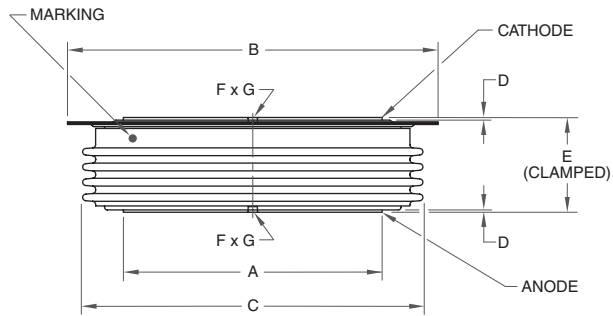


Dim.	Inches	Millimeters
A	3.913 Dia.	99.4 Dia.
B	5.661 Dia.	143.8 Dia.
C	5.181 Dia.	131.6 Dia.
D	0.028 Min.	0.7 Min.

Dim.	Inches	Millimeters
E	1.059 Max.	26.9 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep



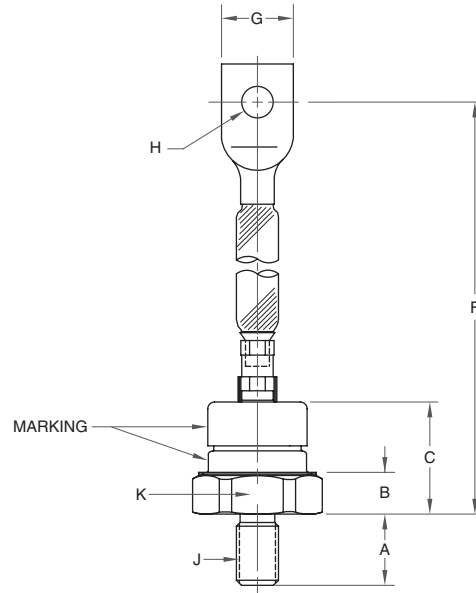
# 13 RDK8



Dim.	Inches	Millimeters
A	3.913 Dia.	99.4 Dia.
B	5.661 Dia.	143.8 Dia.
C	5.181 Dia.	131.6 Dia.
D	0.028 Min.	0.7 Min.

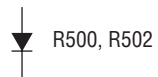
Dim.	Inches	Millimeters
E	1.5 Max.	38.1 Max.
F	0.142 Dia.	3.6 Dia.
G	0.0787 Deep	2.0 Deep

# 14 R500, R501, R502, R503

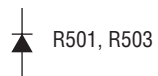


Dim.	Inches	Millimeters
A	0.626	15.9
B	0.358	9.1
C	0.980	24.9
F	4.606 Max.	117.0 Max.
G	0.654 Max.	16.6 Max.

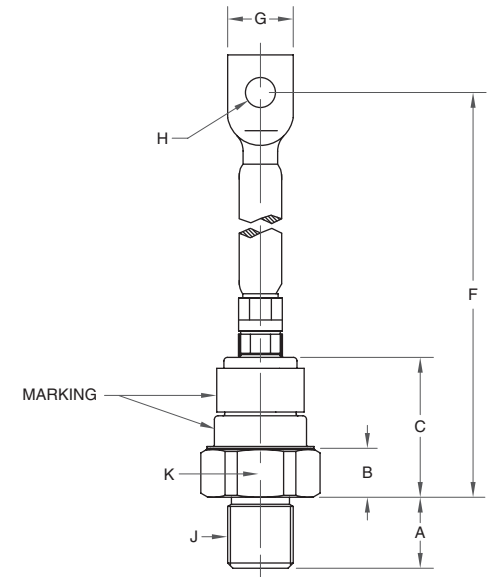
Forward Polarity



Reverse Polarity



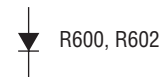
# 15 R600, R601, R602, R603



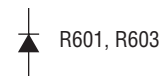
Dim.	Inches	Millimeters
A	0.811	20.6
B	0.559	14.2
C	1.598	40.6
F	5.563 Max.	141.3 Max.
G	0.752 Max.	19.1 Max.

Dim.	Inches	Millimeters
H	0.343 Dia.	8.7 Dia.
J	0.750-16 UNF-2A Thread	
K	1.244 Max.	31.6 Max.

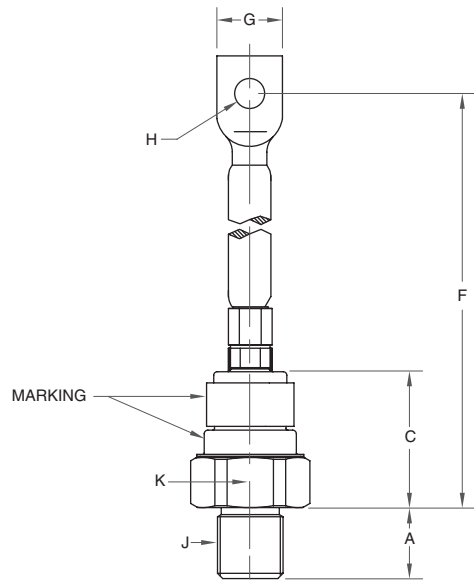
Forward Polarity



Reverse Polarity



# 16 R650



Dim.	Inches	Millimeters
A	0.822	20.88
C	1.56	39.68
F	5.56 Max.	141.228 Max.
G	19.05 Max.	0.75 Max.

Dim.	Inches	Millimeters
H	0.343 Dia.	8.72 Dia.
J	M20 x 1.5	
K	1.245 Max.	31.776 Max.
	(Across Flats)	

Forward Polarity



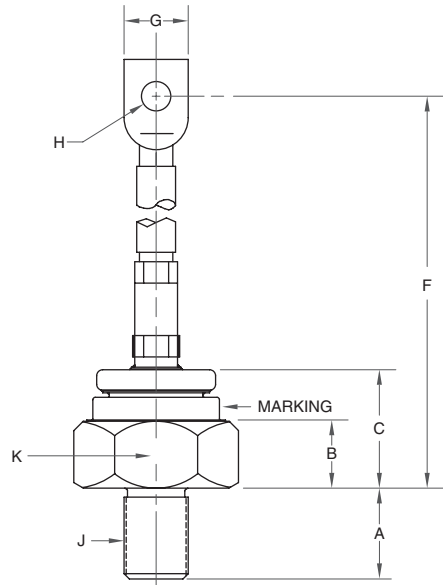
R650

Reverse Polarity



R651

# 17 R700, R701



Dim.	Inches	Millimeters
A	1.059	26.9
B	0.7795	19.8
C	1.409	35.8
F	9.784 Max.	248.5 Max.
G	0.752 Max.	19.1 Max.

Dim.	Inches	Millimeters
H	0.343 Dia.	8.7 Dia.
J	0.750-16 UNF-2A Thread	
K	1.752 Max.	44.5 Max.
	(Across Flats)	

Forward Polarity



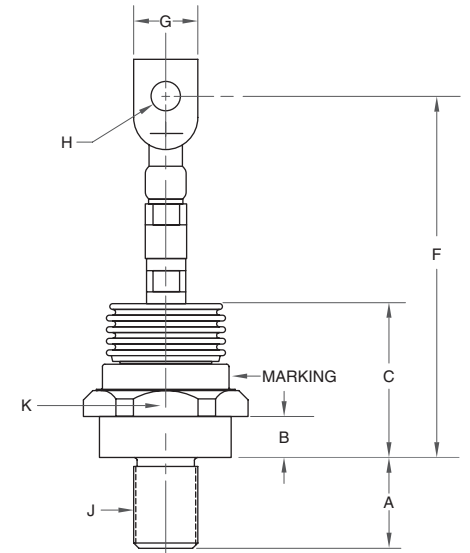
R700

Reverse Polarity



R701

# 18 R7F0, R7F1



Dim.	Inches	Millimeters
A	1.062	26.97
B	0.47	11.94
C	1.81	45.97
F	4.25 Max.	107.95 Max.
G	0.75 Max.	19.05 Max.

Dim.	Inches	Millimeters
H	0.343 Dia.	8.73 Dia.
J	0.750-16 UNF-2A Thread	
K	1.750 Max.	44.45 Max.
	(Across Flats)	

Forward Polarity



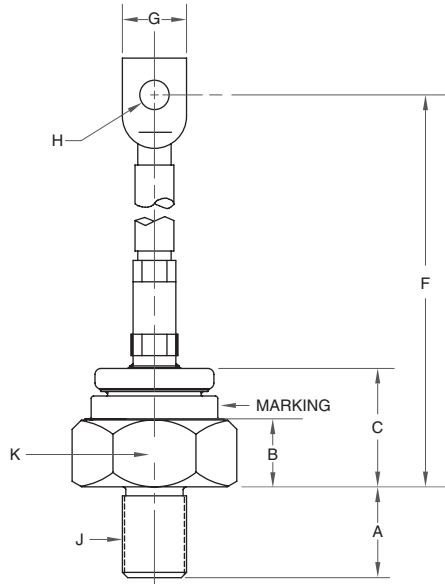
R7F0

Reverse Polarity



R7F1

# 19 R750

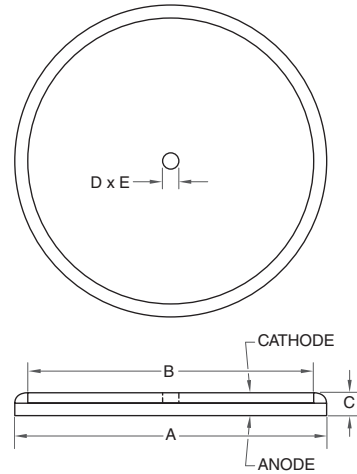


Dim.	Inches	Millimeters
A	1.06	20.9
B	0.75	19.0
C	1.46	37.0
F	9.78 Max.	248.4 Max.
G	0.740 Max.	21.5 Max.

Dim.	Inches	Millimeters
H	0.355 Dia.	9.0 Dia.
J	M24 x 1.5	
K	1.755 Max.	44.6 Max.

(Across Flats)

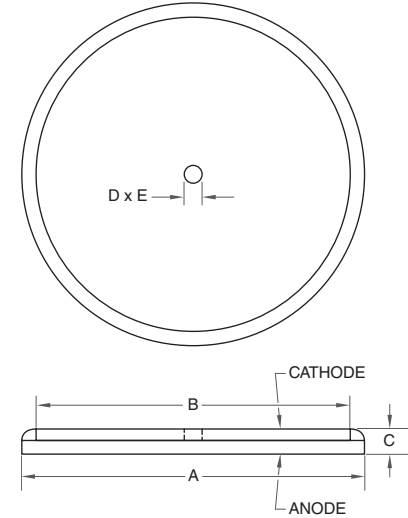
# 20 R9XSMD0448XX, R9XSMD0463XX



Dim.	Inches	Millimeters
A	1.97 Dia.	50.0 Dia.
B	1.7 Dia.	43.2 Dia.
C	0.20	5.0

Dim.	Inches	Millimeters
D	0.142 Dia.	3.6 Dia.
E	0.047 Deep	1.2 Deep

# 21 R9XSMD0475XX



Dim.	Inches	Millimeters
A	2.20 Dia.	56.0 Dia.
B	1.937 Dia.	49.2 Dia.
C	0.2	5.0

Dim.	Inches	Millimeters
D	0.142 Dia.	3.6 Dia.
E	0.047 Deep	1.2 Deep

Forward Polarity



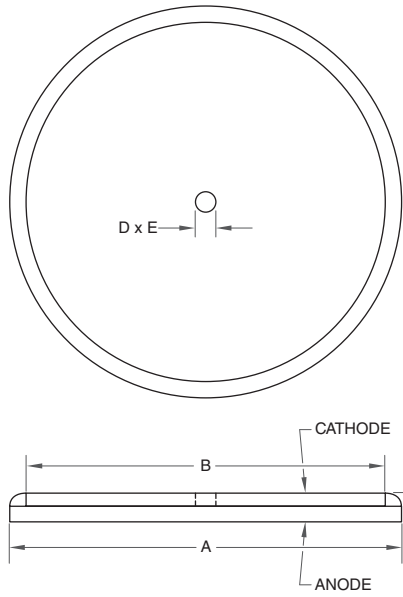
R750

Reverse Polarity



R751

# 22 RAXMHC0412XX



Dim.	Inches	Millimeters	Dim.	Inches	Millimeters
A	2.56 Dia.	65.0 Dia.	D	0.142 Dia.	3.6 Dia.
B	2.28 Dia.	58.0 Dia.	E	0.047 Deep	1.2 Deep
C	0.20	5.0			