

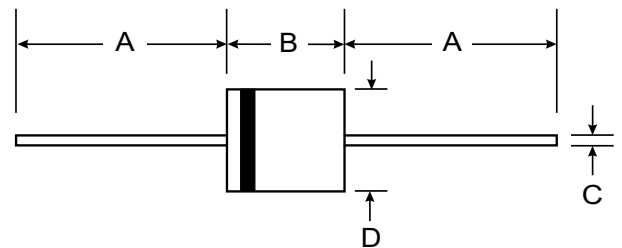
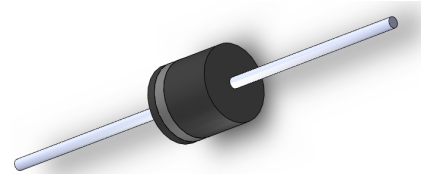
**VOLTAGE RANGE: 20 - 300V**  
**POWER: 20000Watts**

### Features

- Glass passivated junction 20000W Peak Pulse Power capability on 10/1000  $\mu$ s waveform
- Excellent clamping capability
- Repetition rate (duty cycle):0.05%
- Low incremental surge resistance
- Fast response time: typically less than 1.0 ps from 0 volts to BV  
 Typical  $I_d$  less than 1  $\mu$ A above 10V

### Mechanical Data

- Case:R-6
- Polarity: Color band denoted positive end (cathode) except Bipolar
- Terminals: Plated Axial leads, solderable per
- Mounting Position: Any
- Weight: 2.10 grams (approx.)



R-6		
Dim	Min	Max
A	25.4	—
B	8.6	9.1
C	1.2	1.3
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

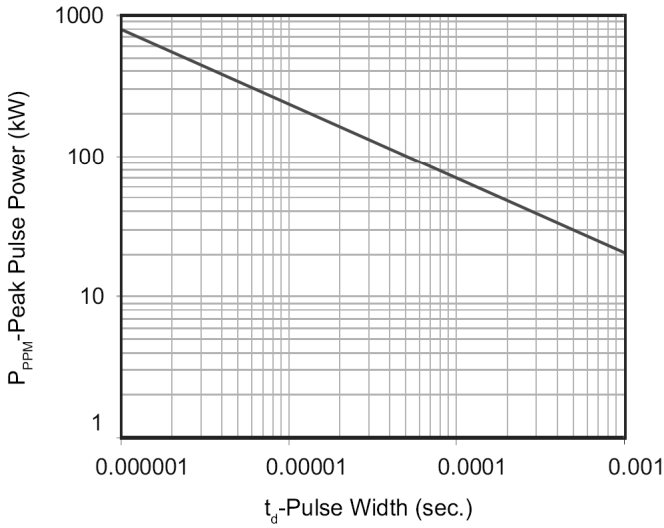
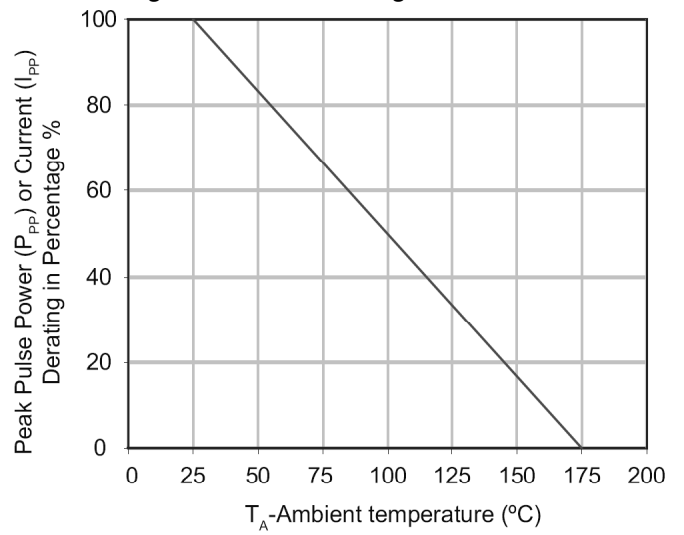
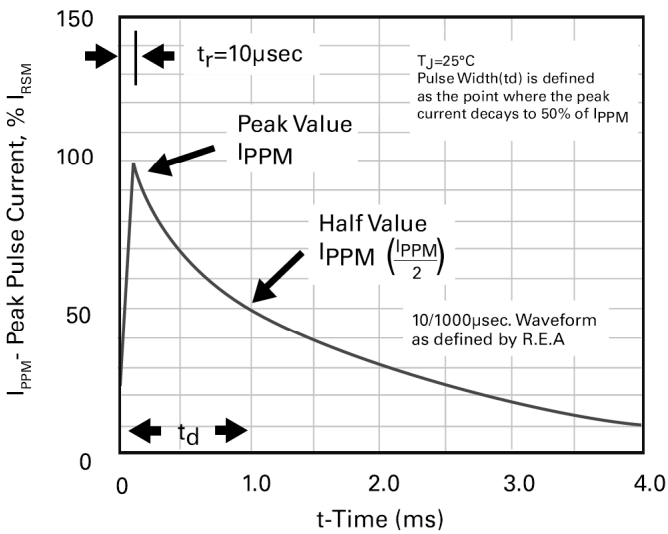
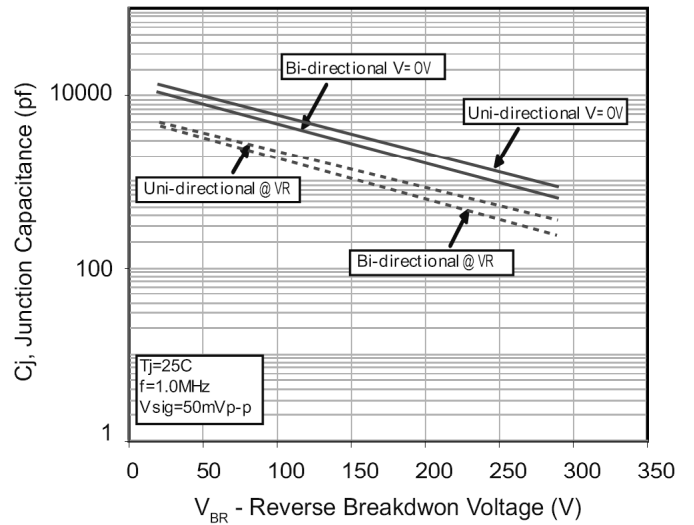
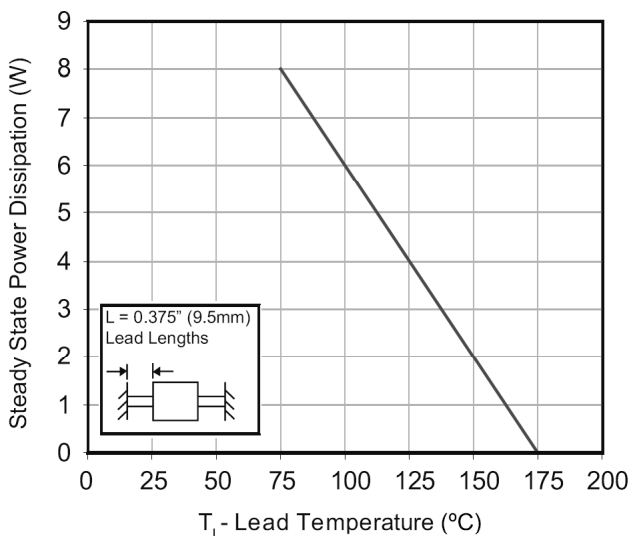
Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation on 10/1000 $\mu$ s waveform (NOTE 1)	Pppm	Minimum 20000	Watts
Peak Pulse Current of on 10-1000 $\mu$ s waveform (NOTE 1)	Ippm	SEE TABLE 1	Amps
Steady State Power Dissipation at $T_I=75^\circ\text{C}$ Lead Lengths.375", (9.5mm)(NOTE 2)	Pm(AV)	8.0	Watts
Peak Forward Surge Current, 8.3ms Sine-Wave Superimposed on Rated Load, (JEDEC Method) (NOTE 3)	IFSM	400.0	Amps
Operatings and Storage Temperature Range	Tj, Tstg	-55 to +175	$^\circ\text{C}$

#### NOTES:

- 1.Non-repetitive current pulse, per Fig.3 and derated above  $T_a=25^\circ\text{C}$  per Fig.2.
- 2.Mounted on Copper Pad area of 0.8x0.8" (20x20mm) per Fig.5.
- 3.8.3ms single half sine-wave, or equivalent square wave, Duty cycle=4 pulses per minutes maximum

TYPE		Reverse Stand-Off Voltage	Breakdown Voltage Min. @I <sub>T</sub>	Breakdown Voltage Max. @ I <sub>T</sub>	Test Current	Peak Pulse Current	Reverse Leakage @V <sub>RWM</sub>	Maximum Clamping Voltage @I <sub>PP</sub>
(UNI)	(BI)	V <sub>RWM</sub> (V)	V <sub>BR MIN</sub> (V)	V <sub>BR MAX</sub> (V)	I <sub>T</sub> (mA)	I <sub>PP</sub> (A)	I <sub>R</sub> (uA)	V <sub>C</sub> (V)
20KPA20A	20KPA20CA	20	22.34	24.38	50	548.9	5000	36.8
20KPA24A	20KPA24CA	24	26.81	29.26	50	490.3	5000	41.2
20KPA26A	20KPA26CA	26	29.04	31.69	50	451.9	2000	44.7
20KPA28A	20KPA28CA	28	31.28	34.13	50	420.8	1000	48.0
20KPA30A	20KPA30CA	30	33.51	36.57	5	392.2	250	51.5
20KPA32A	20KPA32CA	32	35.74	39.01	5	372.0	150	54.3
20KPA34A	20KPA34CA	34	38.0	41.4	5	351.3	50	57.5
20KPA36A	20KPA36CA	36	40.2	43.9	5	328.5	20	61.5
20KPA40A	20KPA40CA	40	44.7	48.8	5	297.9	15	67.8
20KPA44A	20KPA44CA	44	49.1	53.6	5	277.9	2	72.7
20KPA48A	20KPA48CA	48	53.6	58.5	5	254.4	2	79.4
20KPA52A	20KPA52CA	52	58.1	63.4	5	235.4	2	85.8
20KPA56A	20KPA56CA	56	62.6	68.3	5	218.1	2	92.6
20KPA60A	20KPA60CA	60	67.0	73.1	5	207.0	2	97.6
20KPA64A	20KPA64CA	64	71.5	78.0	5	194.2	2	104.0
20KPA68A	20KPA68CA	68	76.0	82.9	5	183.6	2	110.0
20KPA72A	20KPA72CA	72	80.4	87.8	5	174.1	2	116.0
20KPA80A	20KPA80CA	80	89.4	97.5	5	155.4	2	130.0
20KPA88A	20KPA88CA	88	98.3	107.3	5	142.3	2	142.0
20KPA96A	20KPA96CA	96	107.2	117.0	5	130.3	2	155.0
20KPA104A	20KPA104CA	104	116.2	126.8	5	120.2	2	168.0
20KPA112A	20KPA112CA	112	125.1	136.5	5	111.0	2	182.0
20KPA120A	20KPA120CA	120	134.0	146.3	5	104.1	2	194.0
20KPA132A	20KPA132CA	132	147.4	160.9	5	94.8	2	213.0
20KPA144A	20KPA144CA	144	160.8	175.5	5	87.1	2	232.0
20KPA160A	20KPA160CA	160	178.7	195.0	5	78.3	2	258.0
20KPA172A	20KPA172CA	172	192.1	209.7	5	72.9	2	277.0
20KPA180A	20KPA180CA	180	201.1	219.4	5	69.4	2	291.0
20KPA192A	20KPA192CA	192	214.5	234.0	5	65.4	2	309.0
20KPA204A	20KPA204CA	204	227.9	248.7	5	61.4	2	329.0
20KPA216A	20KPA216CA	216	241.3	263.3	5	58.0	2	348.0
20KPA232A	20KPA232CA	232	259.1	282.8	5	54.0	2	374.0
20KPA240A	20KPA240CA	240	268.1	292.6	5	52.2	2	387.0
20KPA256A	20KPA256CA	256	286.0	312.1	5	49.0	2	412.0
20KPA280A	20KPA280CA	280	312.8	341.3	5	44.8	2	451.0
20KPA300A	20KPA300CA	300	335.1	365.7	5	41.8	2	483.0

For bidirectional type having V<sub>RWM</sub> of 40 volts and less, the I<sub>R</sub> limit is double. For parts with A, the V<sub>BR</sub> is ± 5%

**Figure 1 - Peak Pulse Power Rating Curve**

**Figure 2 - Pulse Derating Curve**

**Figure 3 - Pulse Waveform**

**Figure 4 - Typical Junction Capacitance**

**Figure 5 - Steady State Power Derating Curve**

**Figure 6 - Maximum Non-Repetitive Peak Forward Surge Current**
