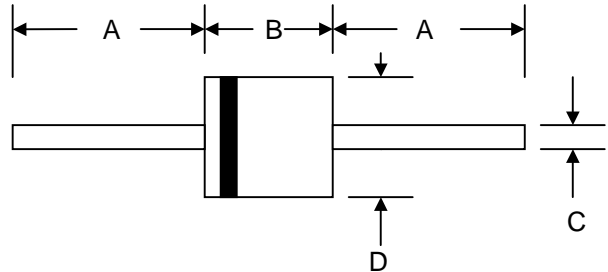


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Features

- Glass Passivated Die Construction
- 5000W Peak Pulse Power Dissipation
- 120V – 220V Standoff Voltage
- Uni- and Bi-Directional Versions Available
- Excellent Clamping Capability
- Fast Response Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O
- UL Recognized File # E224235



Mechanical Data

- Case: JEDEC P-600 Molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band
- Marking:
Unidirectional – Type Number and Cathode Band
Bidirectional – Device Number Only
- Weight: 2.10 grams (approx.)

P-600				
Dim	Min	Max	Min	Max
A	25.4	—	1.000	—
B	8.60	9.10	0.339	0.358
C	1.20	1.30	0.047	0.051
D	8.60	9.10	0.339	0.358
	In ,mm		In inch	

“C” Suffix Designates Bi-directional Devices
“A” Suffix Designates 5% Tolerance Devices
No Suffix Designates 10% Tolerance Devices

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

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation at $T_A = 25^\circ\text{C}$ (Note 1, 2, 5) Figure 3	PPPM	5000 Minimum	W
Peak Forward Surge Current (Note 3)	IFSM	400	A
Peak Pulse Current on 10/1000 μS Waveform (Note 1) Figure 1	IPPM	See Table 1	A
Steady State Power Dissipation (Note 2, 4)	PM(AV)	8.0	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +175	$^\circ\text{C}$

- Note: 1. Non-repetitive current pulse, per Figure 1 and derated above $T_A = 25^\circ\text{C}$ per Figure 4.
2. Mounted on 20mm² copper pad.
3. 8.3ms single half sine-wave duty cycle = 4 pulses per minutes maximum.
4. Lead temperature at $75^\circ\text{C} = T_L$.
5. Peak pulse power waveform is 10/1000 μS .

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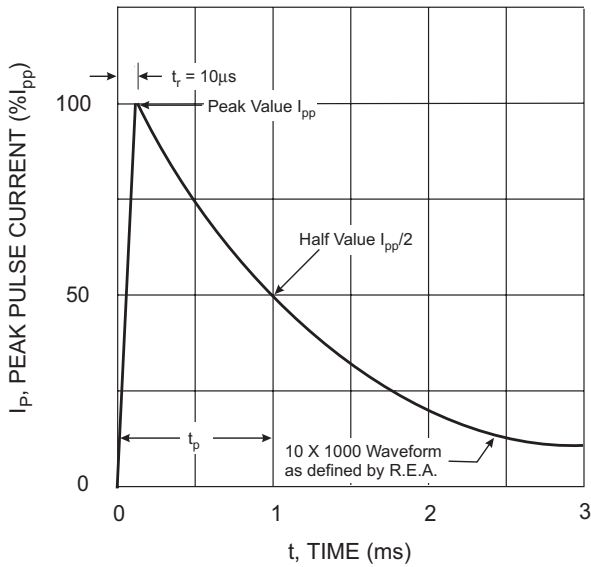


Fig. 1 Pulse Waveform

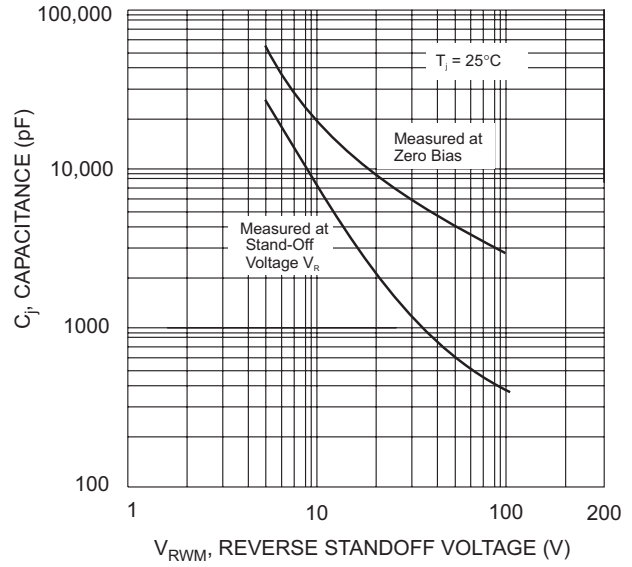


Fig. 2 Typical Junction Capacitance

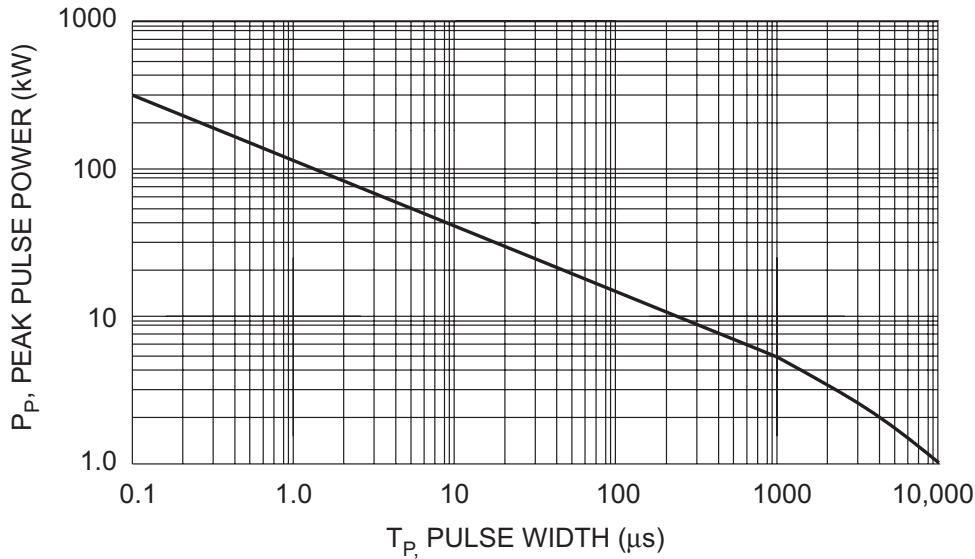


Fig. 3 Pulse Derating Curve

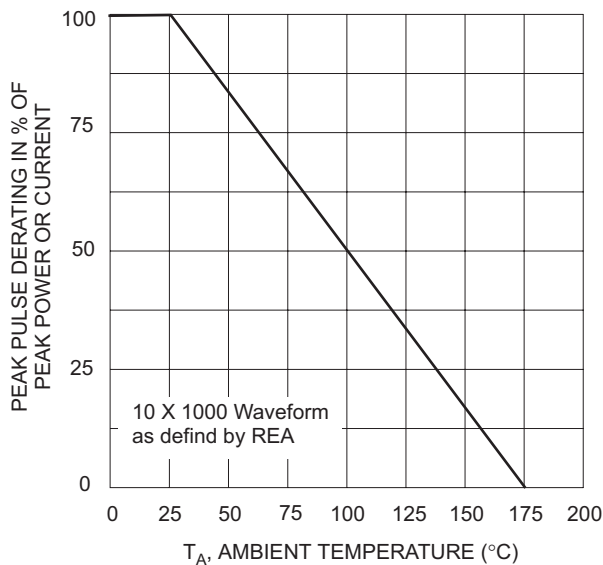


Fig. 4 Pulse Derating Curve

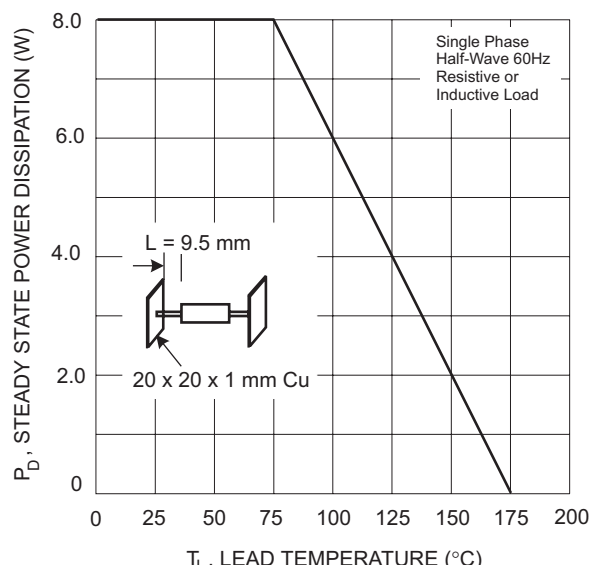


Fig. 5 Steady State Power Derating

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UNI-DIRECTIONAL 5000 WATT AXIAL LEAD TVS

UNI-DIRECTIONAL PART NUMBER	REVERSE STAND-OFF VOLTAGE VRWM (V)	BREAKDOWN VOLTAGE VBR (V) MIN. @IT	BREAKDOWN VOLTAGE VBR (V) MAX. @IT	TEST CURRENT IT (mA)	MAXIMUM CLAMPING VOLTAGE @Ipp Vc (V)	PEAK PULSE CURRENT Ipp (A)	REVERSE LEAKAGE @VRWM IR (uA)
5KP120	120.00	133.00	169.00	5	214.0	23	10
5KP120A	120.00	133.00	153.00	5	193.0	20	10
5KP130	130.00	144.00	182.50	5	231.0	22	10
5KP130A	130.00	144.00	165.50	5	209.0	24	10
5KP150	150.00	167.00	211.50	5	268.0	19	10
5KP150A	150.00	167.00	192.50	5	243.0	21	10
5KP160	160.00	178.00	226.00	5	287.0	17	10
5KP160A	160.00	178.00	205.00	5	259.0	19	10
5KP170	170.00	189.00	239.50	5	304.0	16	10
5KP170A	170.00	189.00	217.50	5	275.0	18	10
5KP180	180.00	198.00	253.80	1	322.0	16	5
5KP180A	180.00	198.00	230.40	1	292.0	17	5
5KP190	190.00	209.00	267.90	1	340.0	15	5
5KP190A	190.00	209.00	243.20	1	308.0	16	5
5KP200	200.00	220.00	282.00	1	358.0	14	5
5KP200A	200.00	220.00	256.00	1	324.0	15	5
5KP210	210.00	231.00	296.10	1	376.0	13	5
5KP210A	210.00	231.00	268.80	1	340.0	15	5
5KP220	220.00	242.00	310.20	1	394.0	13	5
5KP220A	220.00	242.00	281.60	1	356.0	14	5

BI-DIRECTIONAL 5000 WATT AXIAL LEAD TVS

BI-DIRECTIONAL PART NUMBER	REVERSE STAND-OFF VOLTAGE VRWM (V)	BREAKDOWN VOLTAGE VBR (V) MIN. @IT	BREAKDOWN VOLTAGE VBR (V) MAX. @IT	TEST CURRENT IT (mA)	MAXIMUM CLAMPING VOLTAGE @Ipp Vc (V)	PEAK PULSE CURRENT Ipp (A)	REVERSE LEAKAGE @VRWM IR (uA)
5KP120C	120.00	133.00	169.00	5	214.0	23	10
5KP120CA	120.00	133.00	153.00	5	193.0	20	10
5KP130C	130.00	144.00	182.50	5	231.0	22	10
5KP130CA	130.00	144.00	165.50	5	209.0	24	10
5KP150C	150.00	167.00	211.50	5	268.0	19	10
5KP150CA	150.00	167.00	192.50	5	243.0	21	10
5KP160C	160.00	178.00	226.00	5	287.0	17	10
5KP160CA	160.00	178.00	205.00	5	259.0	19	10
5KP170C	170.00	189.00	239.50	5	304.0	16	10
5KP170CA	170.00	189.00	217.50	5	275.0	18	10
5KP180C	180.00	198.00	253.80	1	322.0	16	5
5KP180CA	180.00	198.00	230.40	1	292.0	17	5
5KP190C	190.00	209.00	267.90	1	340.0	15	5
5KP190CA	190.00	209.00	243.20	1	308.0	16	5
5KP200C	200.00	220.00	282.00	1	358.0	14	5
5KP200CA	200.00	220.00	256.00	1	324.0	15	5
5KP210C	210.00	231.00	296.10	1	376.0	13	5
5KP210CA	210.00	231.00	268.80	1	340.0	15	5
5KP220C	220.00	242.00	310.20	1	394.0	13	5
5KP220CA	220.00	242.00	281.60	1	356.0	14	5

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