



5KP5.0(C)A THRU 5KP240(C)A TRANSIENT VOLTAGE SUPPRESSOR

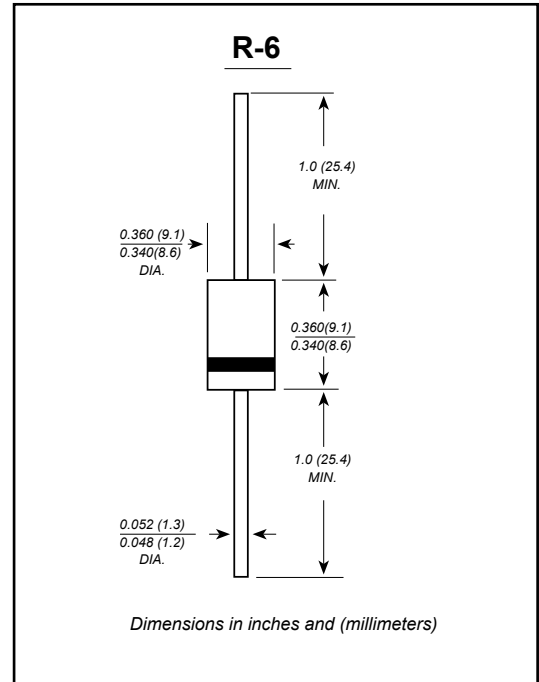
Stand - Off Voltage - 5.0 to 240 Volts Peak Pulse Power - 5000 Watt

FEATURES

- Glass Passivated Die Construction
- Uni- and Bi-Directional Versions Available
- Excellent Clamping Capability
- Fast Response Time
- High Temperat Soldering Guaranteed : 265 C/10 sec./375." (9.5mm) Lead Length, 51bs., (2.3kg) Tension

MECHANICAL DATA

- Case: JEDEC R-6 molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band Except Bi-Directional
- Marking: Any
- Weight: 0.072 ounce, 2.05 grams



"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}	-65 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 40mm² 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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TRANSIENT VOLTAGE SUPPRESSOR

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Type Number Add C For Bi-Directional (Note 4)	Reverse Standoff Voltage	Breakdown Voltage V_{BR} @ I_T (Note 5)		Test Current	Max. Reverse Leakage @ V_{RWM} (Note 6)	Max. Clamping Voltage @ I_{PP}	Max. Peak Pulse Current I_{PP}	Max. Voltage Temp. Variation of V_{BR}
	V_{RWM} (V)	Min (V)	Max (V)	I_T (mA)	I_R (μ A)	V_C (V)	(A)	mV/°C
5KP5.0(C)A	5.0	6.40	7.00	50	5000	9.2	543.0	4.0
5KP6.0(C)A	6.0	6.67	7.37	50	5000	10.3	485.0	4.0
5KP6.5(C)A	6.5	7.22	7.98	50	2000	11.2	447.0	4.0
5KP7.0(C)A	7.0	7.78	8.60	50	1000	12.0	417.0	5.0
5KP7.5(C)A	7.5	8.33	9.21	5.0	250	12.9	388.0	6.0
5KP8.0(C)A	8.0	8.89	9.83	5.0	150	13.6	367.0	6.0
5KP8.5(C)A	8.5	9.44	10.40	5.0	50	14.4	347.0	7.0
5KP9.0(C)A	9.0	10.00	11.10	5.0	20	15.4	325.0	8.0
5KP10(C)A	10.0	11.10	12.30	5.0	15	17.0	294.0	9.0
5KP11(C)A	11.0	12.20	13.50	5.0	10	18.2	274.0	10
5KP12(C)A	12.0	13.30	14.70	5.0	10	19.9	251.0	11
5KP13(C)A	13.0	14.40	15.90	5.0	10	21.5	232.0	12
5KP14(C)A	14.0	15.60	17.20	5.0	10	23.2	215.0	13
5KP15(C)A	15.0	16.70	18.50	5.0	10	24.4	206.0	15
5KP16(C)A	16.0	17.80	19.70	5.0	10	26.0	192.0	16
5KP17(C)A	17.0	18.90	20.90	5.0	10	27.6	181.0	18
5KP18(C)A	18.0	20.00	22.10	5.0	10	29.2	172.0	19
5KP20(C)A	20.0	22.20	24.50	5.0	10	32.4	154.0	22
5KP22(C)A	22.0	24.40	26.90	5.0	10	35.5	141.0	24
5KP24(C)A	24.0	26.70	29.50	5.0	10	38.9	128.0	27
5KP26(C)A	26.0	28.90	31.90	5.0	10	42.1	119.0	29
5KP28(C)A	28.0	31.10	34.40	5.0	10	45.5	110.0	30
5KP30(C)A	30.0	33.30	36.80	5.0	10	48.4	103.0	35
5KP33(C)A	33.0	36.70	40.60	5.0	10	53.3	94.0	38
5KP36(C)A	36.0	40.00	44.20	5.0	10	58.1	86.0	40
5KP40(C)A	40.0	44.40	49.10	5.0	10	64.5	78.0	45
5KP43(C)A	43.0	47.80	52.80	5.0	10	69.4	72.0	49
5KP45(C)A	45.0	50.00	55.30	5.0	10	72.7	69.0	51
5KP48(C)A	48.0	53.30	58.90	5.0	10	77.4	65.0	55
5KP51(C)A	51.0	56.70	62.70	5.0	10	82.4	61.0	60
5KP54(C)A	54.0	60.00	66.30	5.0	10	87.1	57.0	64
5KP58(C)A	58.0	64.40	71.20	5.0	10	93.6	53.0	69
5KP60(C)A	60.0	66.70	73.70	5.0	10	96.8	52.0	70
5KP64(C)A	64.0	71.10	78.60	5.0	10	103.0	49.0	75
5KP70(C)A	70.0	77.80	86.00	5.0	10	113.0	44.0	84
5KP75(C)A	75.0	83.30	92.10	5.0	10	121.0	41.0	90
5KP78(C)A	78.0	86.70	95.80	5.0	10	126.0	40.0	94
5KP85(C)A	85.0	94.40	104.00	5.0	10	137.0	36.0	102
5KP90(C)A	90.0	100.00	111.00	5.0	10	146.0	34.0	109
5KP100(C)A	100.0	111.00	123.00	5.0	10	162.0	31.0	122
5KP110(C)A	110.0	122.00	135.00	5.0	10	177.0	28.0	132
5KP120(C)A	120.0	133.00	148.00	5.0	10	194.0	25.0	140
5KP150(C)A	150.0	166.00	184.00	5.0	10	242.0	20.0	180
5KP180(C)A	180.0	200.00	222.00	5.0	10	292.0	17.0	218
5KP240(C)A	240.0	266.00	296.00	5.0	10	388.0	12.5	280



5KP5.0(C)A~5KP240(C)A

RATINGS AND CHARACTERISTIC CURVES

FIG.1-PULSE DERATING CURVE

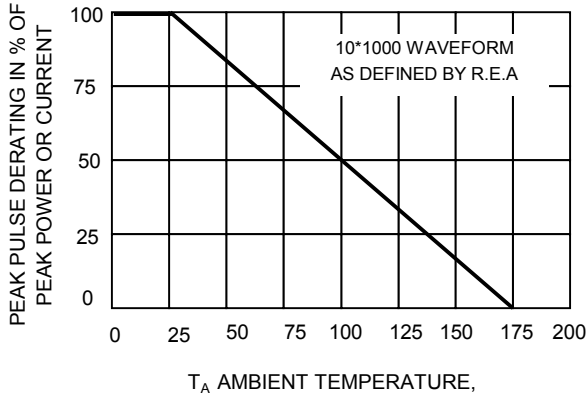


FIG.2-TYPICAL JUNCTION CAPACITANCE

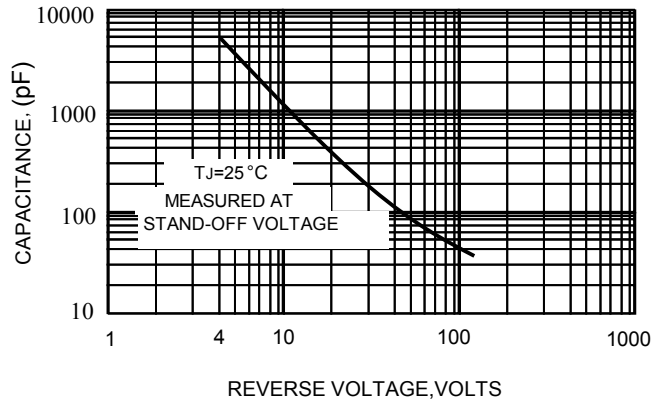


FIG.3-PULSE RATING CURVE

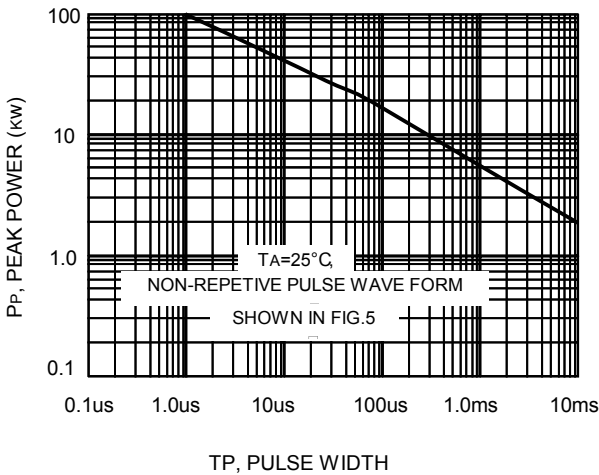


FIG.4-STEADY STATE POWER DERATING CURVE

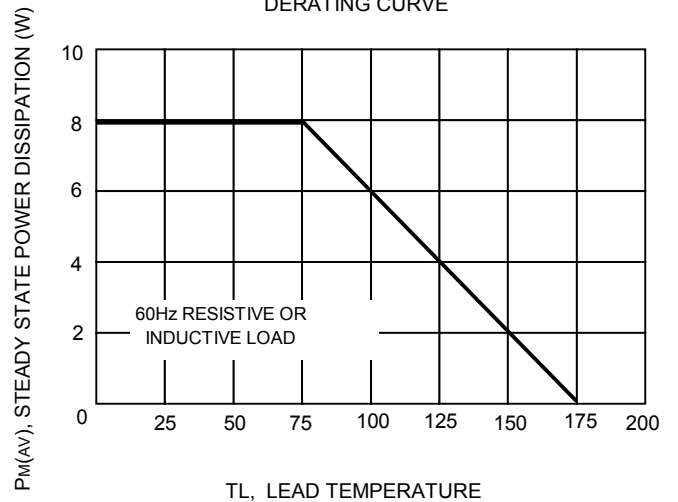


FIG.5 -PULSE WAVEFORM

