

10KP5.0 ~ 10A

V_{RM} : 5.0 - 10 Volts

P_{PK} : 10,000 Watts

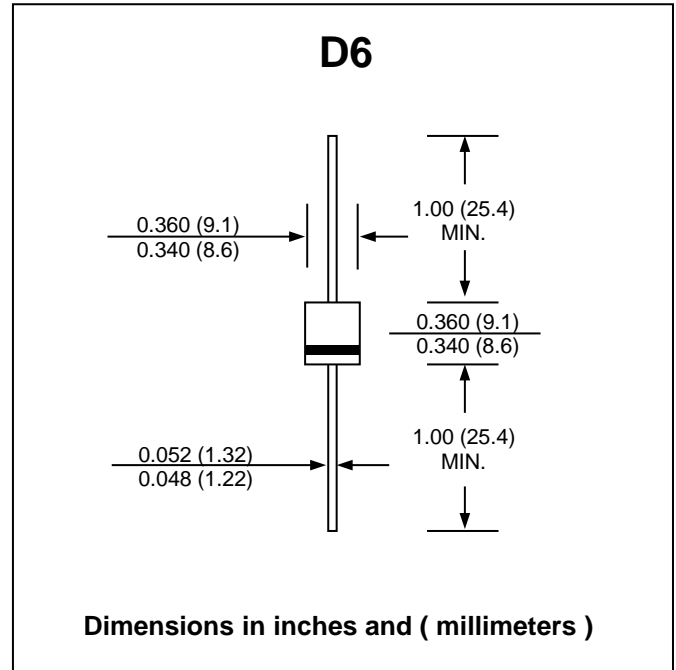
FEATURES :

- * 10,000 Watts Peak Pulse Power
- * Excellent clamping capability
- * Low incremental surge resistance
- * Fast response time : typically less than 1.0 ps from 0 volt to V_{BR(min.)}
- * **Pb / RoHS Free**

MECHANICAL DATA

- * Case : Void-free molded plastic body
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 2.1 grams

TRANSIENT VOLTAGE SUPPRESSOR



MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Unit
Peak Pulse Power Dissipation at tp = 1ms (Note 1, Fig. 4)	P _{PK}	10,000	W
Steady State Power Dissipation at T _L = 75 °C Lead Lengths 0.375", (9.5mm) (Note 2)	P _D	8.0	W
Operating and Storage Temperature Range	T _J , T _{STG}	- 55 to + 150	°C

Notes:

- (1) Non-repetitive Current pulse, per Fig. 5 and derated above Ta = 25 °C per Fig. 1
- (2) Mounted on Copper Leaf area of 0.79 in² (20mm²).



ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

TYPE	Breakdown Voltage @ I_T (Note 1)		Reverse Stand off Voltage	Maximum Reverse Leakage @ V_{RM}	Maximum Peak Pulse Current (Note2)	Maximum Clamping Voltage @ I_{PPM}	Maximum Temperature Coefficient of V_{BR} (%/°C)	
	V_{BR} (V)							I_T
	Min.	Max.	(mA)	(V)	(μ A)	(A)		(V)
10KP5.0	6.40	7.30	50	5.0	5000	1042	9.60	0.057
10KP5.0A	6.40	7.00	50	5.0	5000	1087	9.20	0.057
10KP6.0	6.67	8.15	50	6.0	5000	877	11.4	0.061
10KP6.0A	6.67	7.37	50	6.0	5000	971	10.3	0.061
10KP6.5	7.22	8.82	50	6.5	2000	813	12.3	0.065
10KP6.5A	7.22	7.98	50	6.5	2000	893	11.2	0.065
10KP7.0	7.78	9.51	50	7.0	1000	752	13.3	0.068
10KP7.0A	7.78	8.60	50	7.0	1000	833	12.0	0.068
10KP7.5	8.33	10.2	5	7.5	250	699	14.3	0.073
10KP7.5A	8.33	9.21	5	7.5	250	775	12.9	0.073
10KP8.0	8.89	10.9	5	8.0	150	667	15.0	0.075
10KP8.0A	8.89	9.83	5	8.0	150	735	13.6	0.075
10KP8.5	9.44	11.5	5	8.5	50	629	15.9	0.078
10KP8.5A	9.44	10.4	5	8.5	50	694	14.4	0.078
10KP9.0	10.0	12.2	5	9.0	20	592	16.9	0.081
10KP9.0A	10.0	11.1	5	9.0	20	649	15.4	0.081
10KP10	11.1	13.6	5	10	15	532	18.8	0.084
10KP10A	11.1	12.3	5	10	15	588	17.0	0.084

Notes:

- (1) V_{BR} measured after I_T applied for 300 μ s., I_T = square wave pulse or equivalent.
- (2) Surge Current waveform per Fig. 3
- (4) For Bi-directional devices having V_R of 10 Volts and under the I_R limit is doubled.

RATING AND CHARACTERISTIC CURVES (10KP5.0 ~ 10A)

FIG.1 - PULSE DERATING CURVE

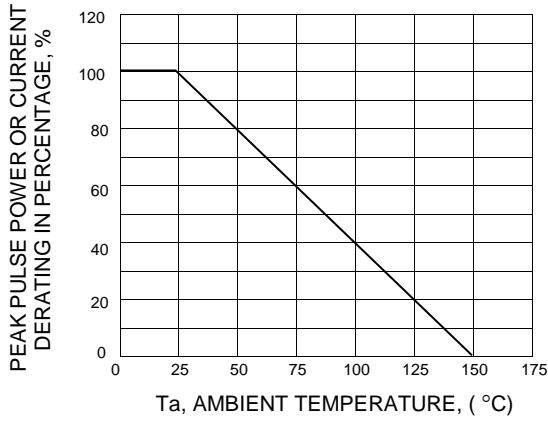


FIG.2 - PULSE WAVEFORM

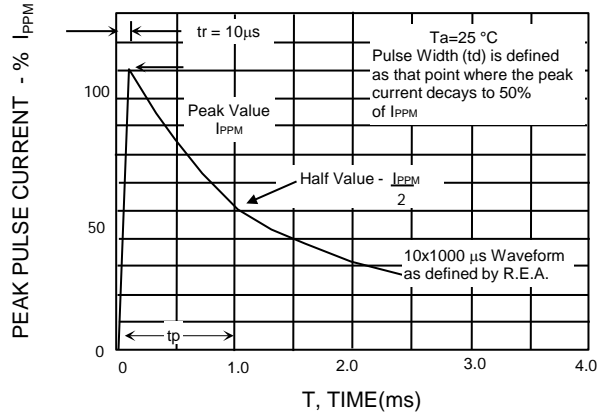


FIG.3 - STEADY STATE POWER DERATING

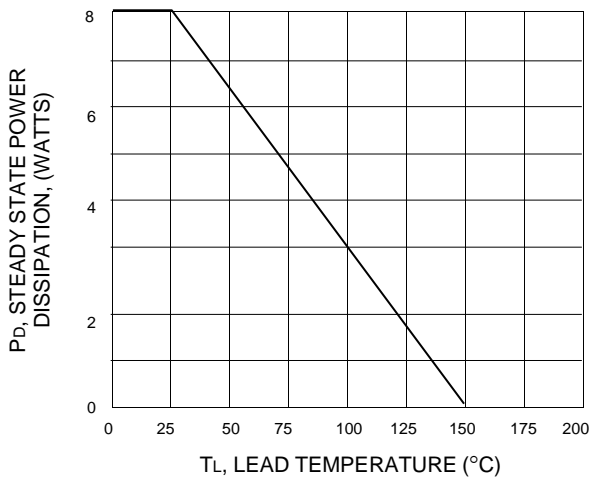


FIG.4 - PEAK PULSE POWER RATING CURVE

