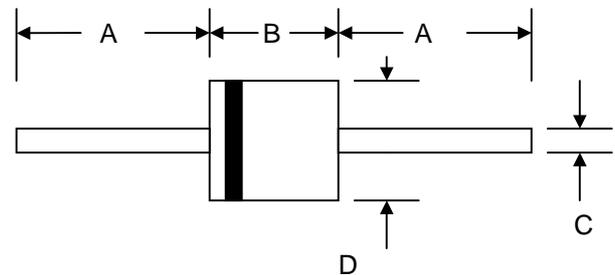


Data Sheet 5010, Rev. —

Features

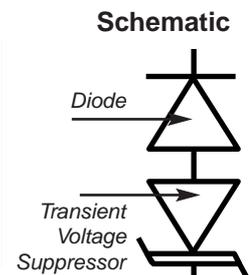
- Glass Passivated Die Construction
- 3000W Peak Pulse Power Dissipation
- 5.0V – 170V Standoff Voltage
- Low Capacitance TVS
- Excellent Clamping Capability
- Fast Response Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O
- UL Recognized File # E224235



Mechanical Data

- Case: JEDEC P-600 Molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: LC3KP28A
- 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



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 1	PPPM	3000 Minimum	W
Peak Forward Surge Current per Figure 6 (Note 3)	IFSM	250	A
Peak Pulse Current on 10/1000 μS Waveform (Note 1) Figure 3	I _{PPM}	See Table 1	A
Steady State Power Dissipation (Note 2, 4)	P _{M(AV)}	8.0	W
Reverse stand-off voltage	V _{RWM}	28	V
Min.Breakdown voltage @I _T	V _{BR}	31.1	V
Max.Breakdown voltage @I _T	V _{BR}	35.8	V
Test current	I _T	1.0	mA
Maximum clamping voltage @I _{pp}	V _C	45.4	V
Peak pulse current	I _{pp}	66.0	A
Peak pulse leakage @V _{RWM}	I _R	5.0	μA
Working Inverse Blocking Voltage	V _{WIB}	75	V
Maximum Inverse Blocking Leakage Current at V _{WIB}	I _D	1.0	mA
Minimum Peak Inverse Blocking Voltage	V _{PIB}	100	V
Max. Junction Capacitance @ 0V 1MHZ @ 12V 1MHZ	C _T	100	pF
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

Data Sheet 5010, Rev. —

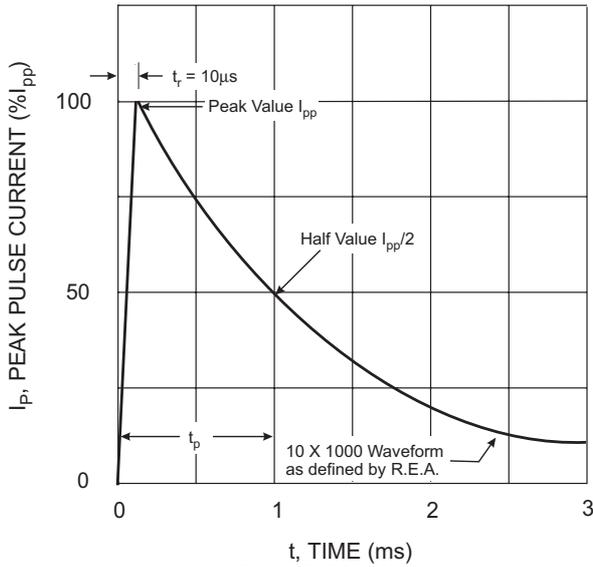
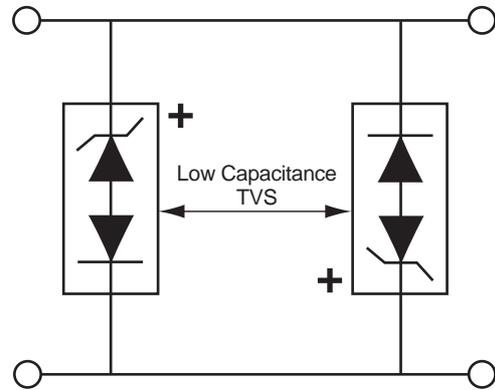


Fig. 1 Pulse Waveform

Fig. 2 - AC Line Protection Application



Application Note: Device must be used with two units in parallel, opposite in polarity as shown in circuit for AC signal line protection.

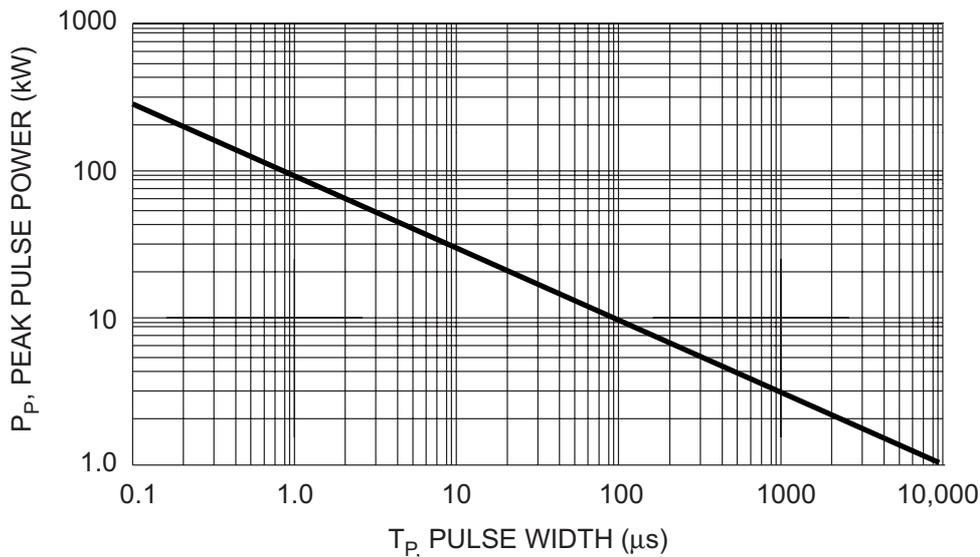


Fig. 3 Pulse Derating Curve

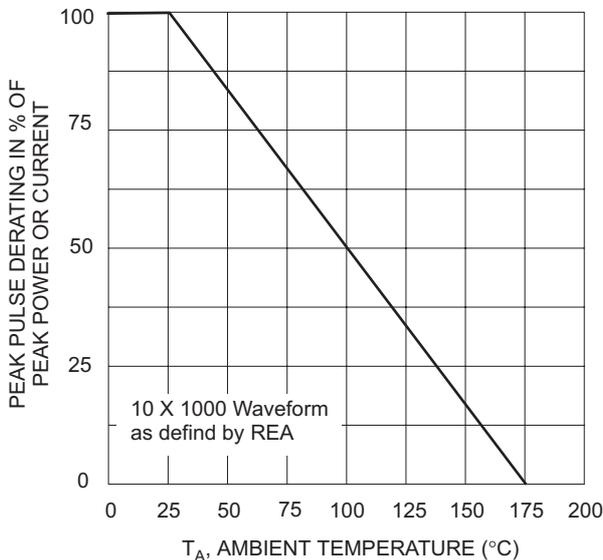


Fig. 4 Pulse Derating Curve

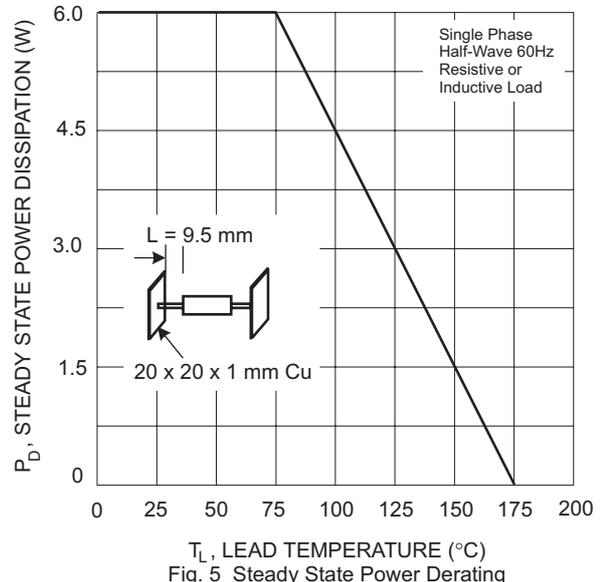


Fig. 5 Steady State Power Derating

Data Sheet 5010, Rev. —

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