# Vishay General Semiconductor



THERMAL CHARACTERISTICS (T <sub>A</sub> = 25 °C unless otherwise noted)					
PARAMETER	SYMBOL	VALUE	UNIT		
Typical thermal resistance	R <sub>eJA</sub> (1)	125	°C/W		
	R <sub>θJL</sub> <sup>(1)</sup>	30	C/VV		

#### Note

(1) Thermal resistance from junction to ambient and junction to lead mounted on P.C.B. with 6.0 mm x 6.0 mm copper pad areas. R<sub>BJL</sub> is measured at the terminal of cathode band.

IMMUNITY TO STATIC ELECTRICAL DISCHARGE TO THE FOLLOWING STANDARDS (T <sub>A</sub> = 25 $^{\circ}$ C unless otherwise noted)							
STANDARD	TEST TYPE	TEST CONDITIONS	SYMBOL	CLASS	VALUE		
AEC-Q101-001	Human body model (contact mode)	C = 100 pF, R = 1.5 kW	V	НЗВ	> 8 kV		
IEC-61000-4-2 (2)	Human body model (air discharge mode) (1)	C = 150 pF, R = 150 W	V <sub>C</sub>	4	> 15 kV		

#### **Notes**

 $^{(1)}$  Immunity to IEC 61000-4-2 air discharge mode has a typical performance  $> 30 \ kV$ 

<sup>(2)</sup> System ESD standard

ORDERING INFORMATION (Example)						
PREFERRED P/N	UNIT WEIGHT (G)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE		
MSP5.0A-E3/89A	0.006	89A	4500	7" diameter plastic tape and reel		
MSP5.0AHE3/89A (1)	0.006	89A	4500	7" diameter plastic tape and reel		
MSP5.0A-M3/89A	0.006	89A	4500	7" diameter plastic tape and reel		
MSP5.0AHM3/89A (1)	0.006	89A	4500	7" diameter plastic tape and reel		

#### Note

### **RATINGS AND CHARACTERISTICS CURVES**

(T<sub>A</sub> = 25 °C unless otherwise noted)

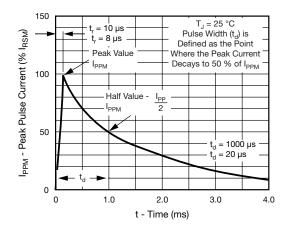


Fig. 1 - Pulse Waveform

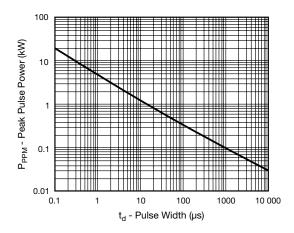


Fig. 2 - Peak Pulse Power Rating Curve

<sup>(1)</sup> AEC-Q101 qualified



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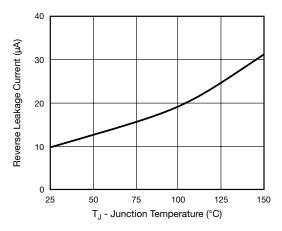


Fig. 3 - Relative Variation of Leakage Current vs. Junction Temperature

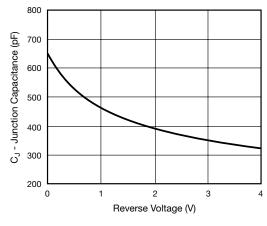


Fig. 5 - Typical Junction Capacitance

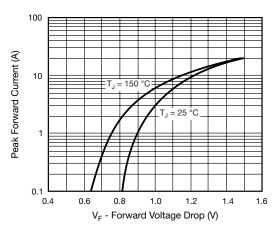


Fig. 4 - Typical Peak Forward Voltage Drop vs. Peak Forward Current

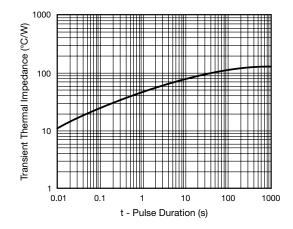
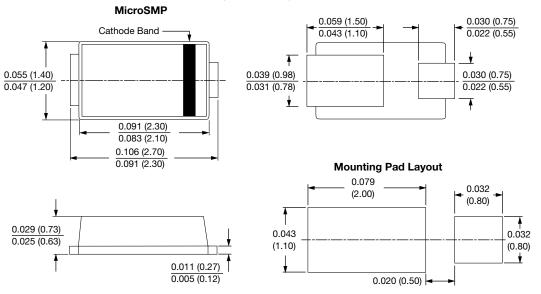


Fig. 6 - Typical Transient Thermal Impedance

### **PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)



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