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## Vishay General Semiconductor

<b>ELECTRICAL CHARACTERISTICS</b> (T <sub>A</sub> = 25 °C unless otherwise noted)									
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT			
Maximum instantaneous forward voltage	$I_F = 3 A$	T <sub>J</sub> = 25 °C	V <sub>F</sub> <sup>(1)</sup>	0.52	0.58	V			
Maximum instantaneous forward voltage	I <sub>F</sub> = 3 A	T <sub>J</sub> = 125 °C		0.43	0.48				
Maximum various augment at vated \/		T <sub>J</sub> = 25 °C	I <sub>R</sub> <sup>(2)</sup>	-	200	μΑ			
Maximum reverse current at rated V <sub>R</sub>		T <sub>J</sub> = 125 °C		9.0	20	mA			
Typical junction capacitance	4.0 V, 1 MHz		CJ	130		pF			

#### Notes

(1) Pulse test: 300 µs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

THERMAL CHARACTERISTICS (T <sub>A</sub> = 25 °C unless otherwise specified)						
PARAMETER	SYMBOL	SS3P3	UNIT			
	R <sub>0JA</sub> (1)	95				
Typical thermal resistance (1)	R <sub>eJL</sub> (1)	15	°C/W			
	R <sub>0</sub> JC (1)	20				

#### Note

(1) Thermal resistance from junction to ambient and junction to lead mounted on PCB with 5.0 mm x 5.0 mm copper pad areas.  $R_{\theta JL}$  is measured at the terminal of cathode band.  $R_{\theta JC}$  is measured at the top center of the body

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
SS3P3-M3/84A	0.024	84A	3000	7" diameter plastic tape and reel			
SS3P3-M3/85A	0.024	85A	10 000	13" diameter plastic tape and reel			
SS3P3HM3/84A (1)	0.024	84A	3000	7" diameter plastic tape and reel			
SS3P3HM3/85A (1)	0.024	85A	10 000	13" diameter plastic tape and reel			

#### Note

(1) Automotive grade



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### RATINGS AND CHARACTERISTICS CURVES (T<sub>A</sub> = 25 °C unless otherwise noted)

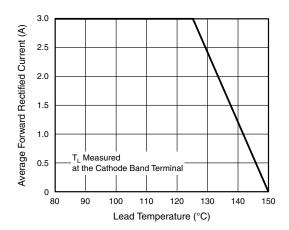


Fig. 1 - Forward Current Derating Curve

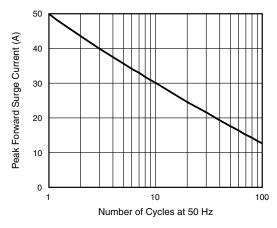


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

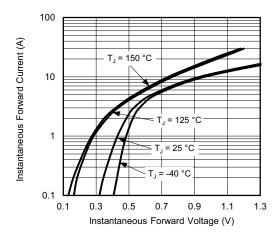


Fig. 3 - Typical Instantaneous Forward Characteristics

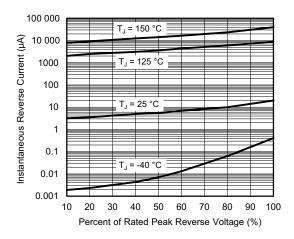


Fig. 4 - Typical Reverse Leakage Characteristics

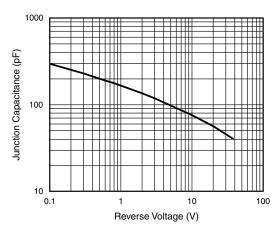


Fig. 5 - Typical Junction Capacitance

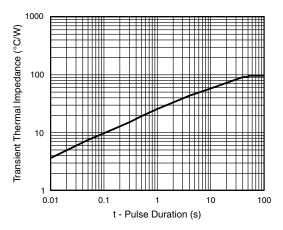


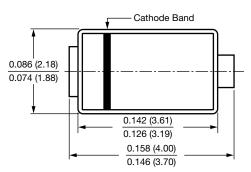
Fig. 6 - Typical Transient Thermal Impedance

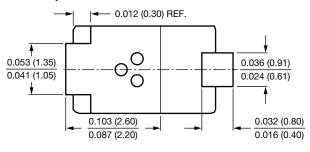


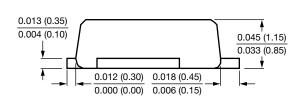
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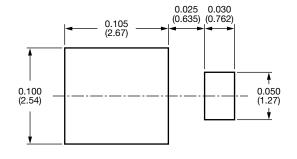
### **PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)

### **SMP (DO-220AA)**











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