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## Vishay General Semiconductor

<b>ELECTRICAL CHARACTERISTICS</b> ( $T_A = 25$ °C unless otherwise noted)								
PARAMETER	SYMBOL	TEST CONDITIONS		TYP.	MAX.	UNIT		
Maximum instantaneous forward voltage	V <sub>F</sub> <sup>(1)</sup>	I <sub>F</sub> = 4.0 A		0.447	-	V		
		I <sub>F</sub> = 8.0 A		0.533	0.57			
		I <sub>F</sub> = 4.0 A	- T <sub>A</sub> = 125 °C	0.357	-			
		I <sub>F</sub> = 8.0 A		0.472	0.49			
Maximum reverse current	I <sub>R (2)</sub>	V <sub>R</sub> = 30 V	T <sub>A</sub> = 25 °C T <sub>A</sub> = 125 °C	55	200	μA		
			T <sub>A</sub> = 125 °C	24	35	mA		
Typical junction capacitance	CJ	4.0 V, 1 MHz		330	-	pF		

Notes

 $^{(1)}\,$  Pulse test: 300  $\mu s$  pulse width, 1 % duty cycle

<sup>(2)</sup> Pulse test: Pulse width  $\leq$  40 ms

<b>THERMAL CHARACTERISTICS</b> ( $T_A = 25 \text{ °C}$ unless otherwise noted)							
PARAMETER	SYMBOL	SS8P2L	SS8P3L	UNIT			
Typical thermal resistance	R <sub>0JA</sub> <sup>(1)</sup>	60		°C/W			
	$R_{ ext{ heta}JL}$	3.5					

#### Note

<sup>(1)</sup> Units mounted on recommended PCB 1 oz. pad layout

ORDERING INFORMATION (Example)								
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE				
SS8P3L-M3/86A	0.1	86A	1500	7" diameter plastic tape and reel				
SS8P3L-M3/87A	0.1	87A	6500	13" diameter plastic tape and reel				
SS8P3LHM3/86A (1)	0.1	86A	1500	7" diameter plastic tape and reel				
SS8P3LHM3/87A <sup>(1)</sup>	0.1	87A	6500	13" diameter plastic tape and reel				
SS8P3LHM3_A/H <sup>(1)</sup>	0.1	Н	1500	7" diameter plastic tape and reel				
SS8P3LHM3_A/I <sup>(1)</sup>	0.1	I	6500	13" diameter plastic tape and reel				

Note

(1) AEC-Q101 qualified



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### **RATINGS AND CHARACTERISTICS CURVES** ( $T_A = 25$ °C unless otherwise noted)

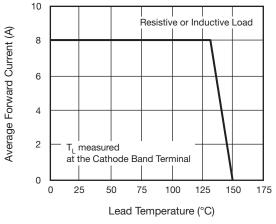


Fig. 1 - Maximum Forward Current Derating Curve

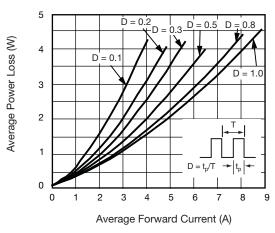


Fig. 2 - Forward Power Loss Characteristics

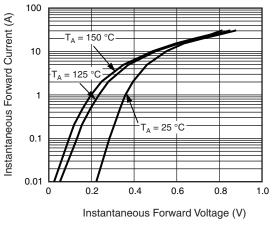


Fig. 3 - Typical Instantaneous Forward Characteristics

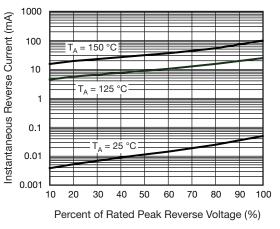
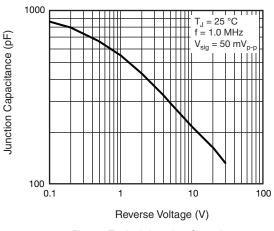


Fig. 4 - Typical Reverse Leakage Characteristics





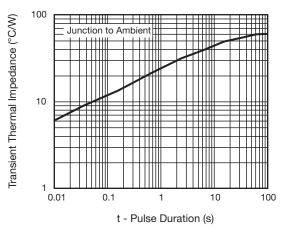


Fig. 6 - Typical Transient Thermal Impedance

Revision: 20-Jan-15

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Document Number: 89001

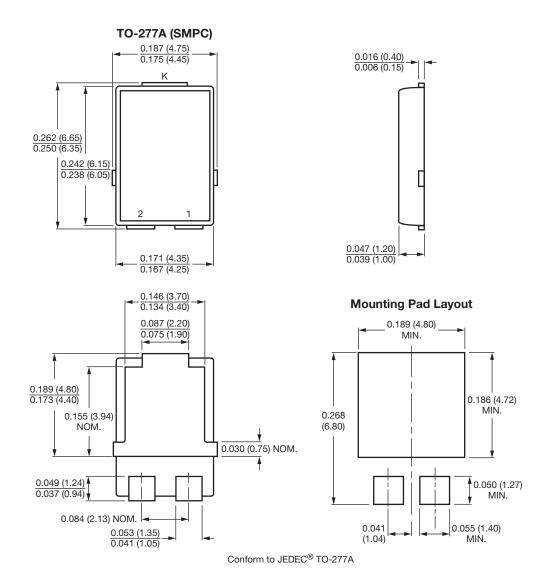
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#### **PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)





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