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# Vishay General Semiconductor

<b>ELECTRICAL CHARACTERISTICS</b> ( $T_A = 25 \text{ °C}$ unless otherwise noted)									
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT			
Maximum instantaneous forward voltage	I <sub>F</sub> = 1.5 A	T <sub>A</sub> = 25 °C	V <sub>F</sub> <sup>(1)</sup>	0.464	-	V			
	I <sub>F</sub> = 3.0 A			0.542	0.60				
	I <sub>F</sub> = 1.5 A	T <sub>A</sub> = 125 °C		0.379	-				
	I <sub>F</sub> = 3.0 A			0.478	0.54				
Maximum reverse current	Rated V <sub>R</sub>	T <sub>A</sub> = 25 °C	I <sub>R</sub> <sup>(2)</sup>	8.4	150	μA			
	naleu v <sub>R</sub>	T <sub>A</sub> = 125 °C		3.4	15	mA			
Typical junction capacitance	4.0 V, 1 MHz	4.0 V, 1 MHz		200	-	pF			

### Notes

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

 $^{(2)}$  Pulse test: Pulse width  $\leq 40~ms$ 

<b>THERMAL CHARACTERISTICS</b> ( $T_A = 25 \text{ °C}$ unless otherwise specified)								
PARAMETER	SYMBOL	SS3P5L	SS3P6L	UNIT				
Typical thermal resistance	R <sub>0JA</sub> <sup>(1)</sup>	65		°C/W				
	$R_{ ext{ heta}JL}$	3						

#### Note

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

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
SS3P5L-M3/86A	0.10	86A	1500	7" diameter plastic tape and reel			
SS3P5L-M3/87A	0.10	87A	6500	13" diameter plastic tape and reel			
SS3P5LHM3/86A <sup>(1)</sup>	0.10	86A	1500	7" diameter plastic tape and reel			
SS3P5LHM3/87A <sup>(1)</sup>	0.10	87A	6500	13" diameter plastic tape and reel			
SS3P5LHM3_A/H <sup>(1)</sup>	0.10	Н	1500	7" diameter plastic tape and reel			
SS3P5LHM3_A/I <sup>(1)</sup>	0.10	I	6500	13" diameter plastic tape and reel			

Note

(1) AEC-Q101 qualified



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

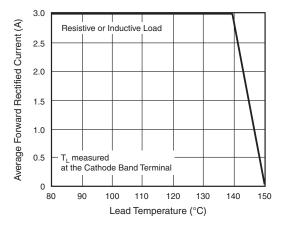


Fig. 1 - Maximum Forward Current Derating Curve

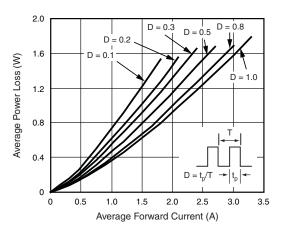


Fig. 2 - Forward Power Loss Characteristics

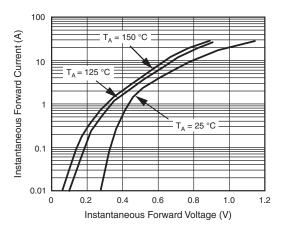


Fig. 3 - Typical Instantaneous Forward Characteristics

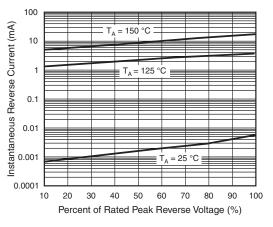


Fig. 4 - Typical Reverse Characteristics

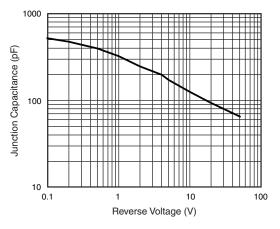


Fig. 5 - Typical Junction Capacitance

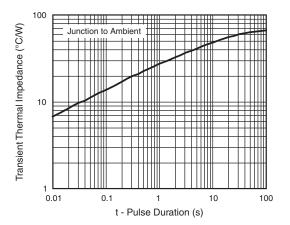


Fig. 6 - Typical Transient Thermal Impedance

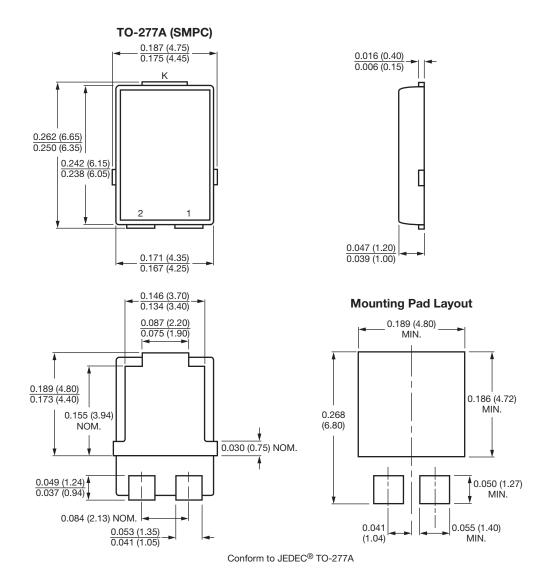
Document Number: 88987

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





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