

Vishay General Semiconductor

ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)									
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT			
Instantaneous forward voltage	I _F = 2.5 A	T _A = 25 °C	V _F ⁽¹⁾	0.708	-	V			
	I _F = 5.0 A			0.832	0.88				
	I _F = 2.5 A	T _A = 125 °C		0.571	-				
	I _F = 5.0 A			0.649	0.68				
Reverse current	Rated V _R	T _A = 25 °C	I _R ⁽²⁾	4.5	15	μΑ			
		T _A = 125 °C		2.7	5	mA			
Typical junction capacitance	4.0 V, 1 MHz	4.0 V, 1 MHz		130	-	pF			

Notes

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

(2) Pulse test: Pulse width ≤ 40 ms

THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise specified)							
PARAMETER	SYMBOL	SS5P9	SS5P10	UNIT			
T	R _{0JA} (1)	65		°C/W			
Typical thermal resistance	$R_{ hetaJL}$	3					

Note

⁽¹⁾ Units mounted on recommended PCB 1 oz. pad layout

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
SS5P10-M3/86A	0.10	86A	1500	7" diameter plastic tape and reel			
SS5P10-M3/87A	0.10	87A	6500	13" diameter plastic tape and reel			
SS5P10HM3_A/H (1)	0.10	Н	1500	7" diameter plastic tape and reel			
SS5P10HM3_A/I (1)	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 °C unless otherwise noted)

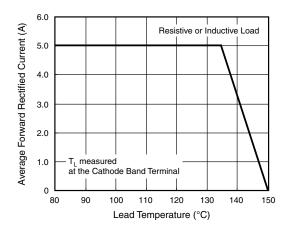


Fig. 1 - Maximum Forward Current Derating Curve

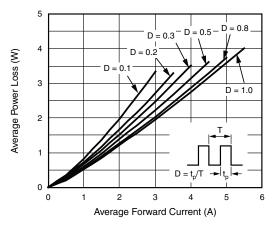


Fig. 2 - Forward Power Loss Characteristics

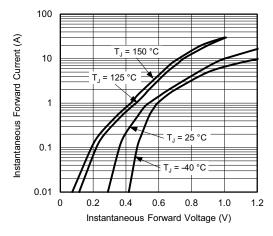


Fig. 3 - Typical Instantaneous Forward Characteristics

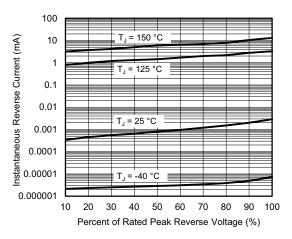


Fig. 4 - Typical Reverse Characteristics

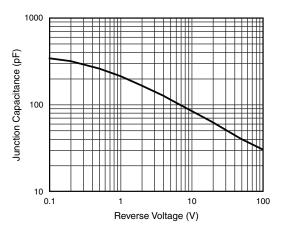


Fig. 5 - Typical Junction Capacitance

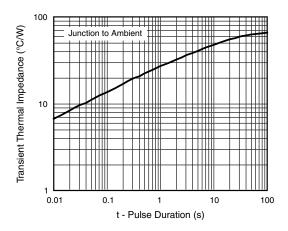
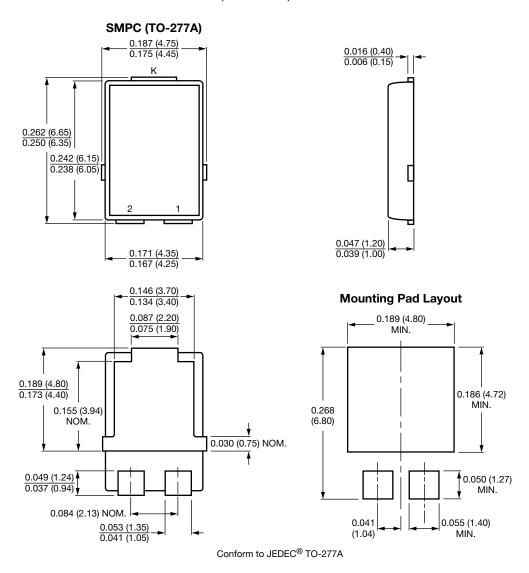


Fig. 6 - Typical Transient Thermal Impedance



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PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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Vishay

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