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Vishay General Semiconductor

ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)									
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT			
Instantaneous forward voltage	$I_F = 0.5 A$	T _A = 25 °C	V _F ⁽¹⁾	0.65	-	- V			
	I _F = 1.0 A			0.72	0.80				
	$I_F = 0.5 A$	T _A = 125 °C		0.51	-				
	I _F = 1.0 A			0.57	0.65				
Reverse current	V _R = 100 V	T _A = 25 °C	I _R ⁽²⁾	-	5	μА			
		T _A = 125 °C		65	160				
Typical junction capacitance	4.0 V, 1 MHz		CJ	70	-	pF			

Notes

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

(2) Pulse test: Pulse width ≤ 5 ms

THERMAL CHARACTERISTICS (T _A = 25 °c unless otherwise noted)					
PARAMETER	SYMBOL	SS1FH10	UNIT		
Typical thermal resistance	R ₀ JA (1)(2)(3)	125	°C/W		
Typical thermal resistance	R _{0JM} (2)(3)	26			

Notes

 $^{(1)}$ The heat generated must be less than the thermal conductivity from junction-to-ambient: $dP_D/dT_J < 1/R_{\theta JA}$

(2) Device mounted on FR4 PCB, 2 oz. standard footprint

 $^{(3)}$ Thermal resistance $R_{\theta JA}$ - junction to ambient; $R_{\theta JM}$ - junction to mount

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
SS1FH10-M3/H	0.015	Н	3000	7" diameter plastic tape and reel			
SS1FH10-M3/I	0.015	I	10 000	13" diameter plastic tape and reel			
SS1FH10HM3/H (1)	0.015	Н	3000	7" diameter plastic tape and reel			
SS1FH10HM3/I (1)	0.015	I	10 000	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)

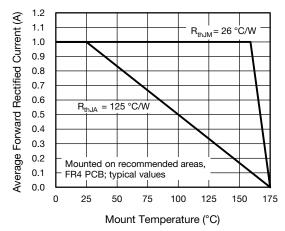


Fig. 1 - Typical Forward Current Derating Curve

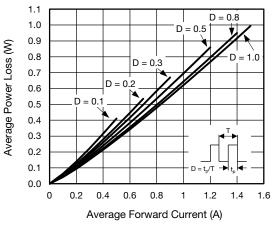


Fig. 2 - Forward Power Loss Characteristics

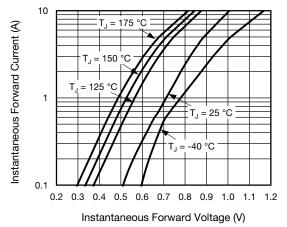


Fig. 3 - Typical Instantaneous Forward Characteristics

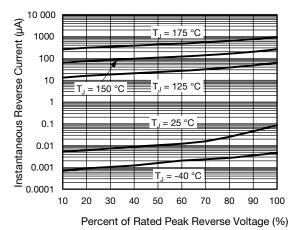


Fig. 4 - Typical Reverse Leakage Characteristics

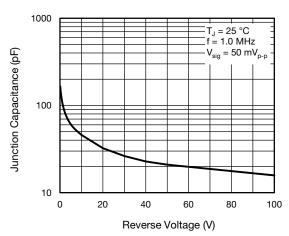


Fig. 5 - Typical Junction Capacitance

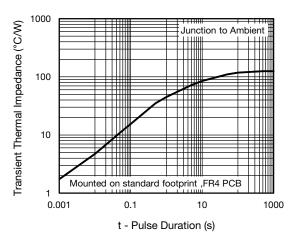
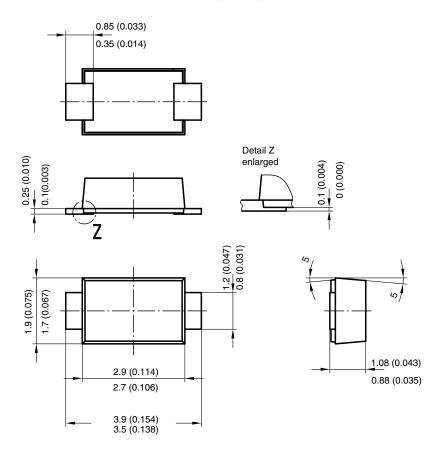


Fig. 6 - Typical Transient Thermal Impedance

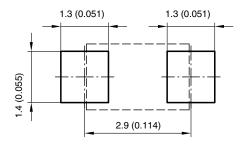


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PACKAGE OUTLINE DIMENSIONS in millimeters (inches)



Foot print recommendation:



Created - Date: 15. February 2005 Rev. 3 - Date: 13. March 2007 Document no.: S8-V-3915.01-001 (4)

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