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# Vishay General Semiconductor

<b>ELECTRICAL CHARACTERISTICS</b> (T <sub>A</sub> = 25 °C unless otherwise noted)									
PARAMETER	TEST CONDITIONS		SYMBOL	SS2H9	SS2H10	UNIT			
Maximum instantaneous forward voltage (1)	I <sub>F</sub> = 2.0 A	T <sub>J</sub> = 25 °C T <sub>J</sub> = 125 °C	V <sub>F</sub>	0.79		V			
		T <sub>J</sub> = 125 °C		0.65					
Maximum reverse current at rated V <sub>B</sub> <sup>(2)</sup>		T <sub>J</sub> = 25 °C	- I <sub>R</sub>	10		μA			
iviaximum reverse current at rated $v_R \leftarrow$		T <sub>J</sub> = 125 °C		4		mA			

#### Notes

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

(2) Pulse test: pulse width ≤ 40 ms

THERMAL CHARACTERISTICS (T <sub>A</sub> = 25 °C unless otherwise noted)							
PARAMETER	SYMBOL	SS2H9	SS2H10	UNIT			
Maximum thermal resistance junction-to-lead T <sub>1</sub> = 25 °C <sup>(1)</sup>	$R_{\theta JA}$	80		°C/W			
Maximum thermal resistance junction-to-lead 1 = 25° C ***	$R_{\theta JL}$	25					

#### Note

 $^{(1)}\,$  Units mounted on PCB with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
SS2H10-E3/52T	0.096	52T	750	7" diameter plastic tape and reel			
SS2H10-E3/5BT	0.096	5BT	3200	13" diameter plastic tape and reel			
SS2H10HE3_A/H (1)	0.096	Н	750	7" diameter plastic tape and reel			
SS2H10HE3_A/I (1)	0.096	I	3200	13" diameter plastic tape and reel			
SS2H10-M3/52T	0.096	52T	750	7" diameter plastic tape and reel			
SS2H10-M3/5BT	0.096	5BT	3200	13" diameter plastic tape and reel			
SS2H10HM3_A/H (1)	0.096	Н	750	7" diameter plastic tape and reel			
SS2H10HM3_A/I (1)	0.096	I	3200	13" diameter plastic tape and reel			

#### Note

(1) AEC-Q101 qualified

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

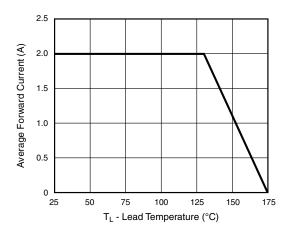


Fig. 1 - Forward Current Derating Curve

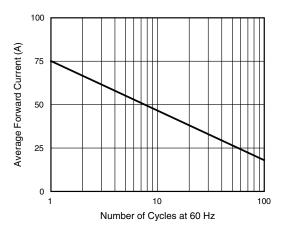


Fig. 2 - Max Non-Repetitive Peak Forward Surge Current

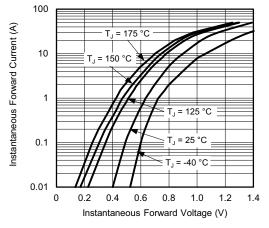


Fig. 3 - Typical Instanteous Forward Characteristics

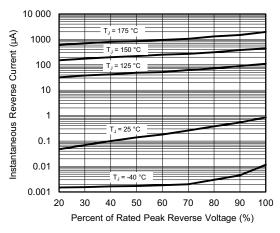


Fig. 4 - Typical Reverse Characteristics

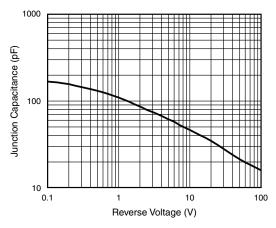


Fig. 5 - Typical Junction Capacitance

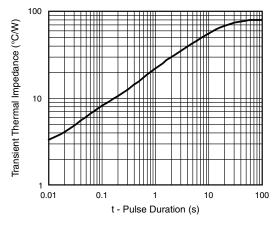


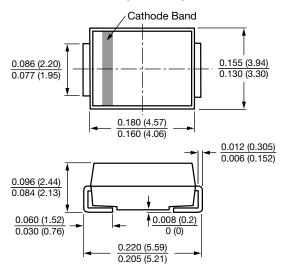
Fig. 6 - Typical Transient Thermal Impedance Per Leg



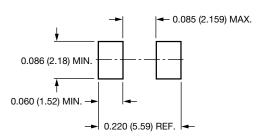
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### **PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)

#### SMB (DO-214AA)



### Mounting Pad Layout





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