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Vishay General Semiconductor

ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)											
PARAMETER	TEST CONDITIONS		SYMBOL	S1A	S1B	S1D	S1G	S1J	S1K	S1M	UNIT
Maximum instantaneous forward voltage	1.0 A		V _F	1.1				V			
Maximum DC reverse current at rated DC blocking voltage		$T_A = 25 ^{\circ}\text{C}$ $T_A = 125 ^{\circ}\text{C}$	- I _R	1.0 5.0		.0	μA				
at rates 20 biodimig restage		1A = 125 C		50							
Typical reverse recovery time	$I_F = 0.5 \text{ A}, I_R = 1.0 \text{ A}, I_{rr} = 0.25 \text{ A}$		t _{rr}		1.8						μs
Typical junction capacitance	4.0 V, 1 MHz		CJ	12						pF	

THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)									
PARAMETER	SYMBOL	S1A	S1B	S1D	S1G	S1J	S1K	S1M	UNIT
Typical thermal resistance (1)	$R_{\theta JA}$	75					85		°C/W
Typical thermal resistance (*)	$R_{\theta JL}$	27				30		C/VV	

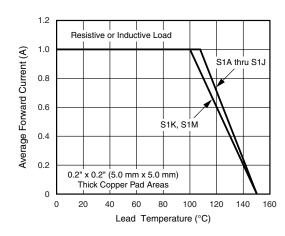
Note

⁽¹⁾ Thermal resistance from junction to ambient and from junction to lead 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				
S1J-E3/61T	0.064	61T	1800	7" diameter plastic tape and reel				
S1J-E3/5AT	0.064	5AT	7500	13" diameter plastic tape and reel				
S1JHE3_A/H ⁽¹⁾	0.064	Н	1800	7" diameter plastic tape and reel				
S1JHE3_A/I (1)	0.064	I	7500	13" diameter plastic tape and reel				
S1J-M3/61T	0.064	61T	1800	7" diameter plastic tape and reel				
S1J-M3/5AT	0.064	5AT	7500	13" diameter plastic tape and reel				
S1JHM3_A/H (1)	0.064	Н	1800	7" diameter plastic tape and reel				
S1JHM3_A/I ⁽¹⁾	0.064	I	7500	13" diameter plastic tape and reel				

Note

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





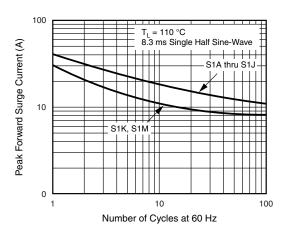


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

⁽¹⁾ AEC-Q101 qualified

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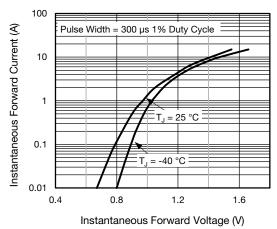


Fig. 3 - Typical Instantaneous Forward Characteristics

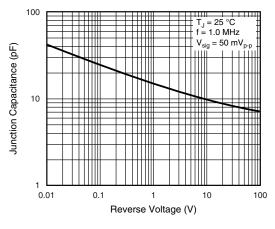


Fig. 5 - Typical Junction Capacitance

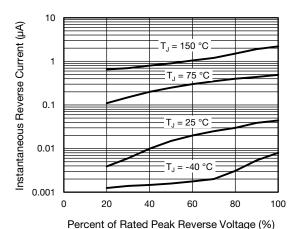


Fig. 4 - Typical Reverse Leakage Characteristics

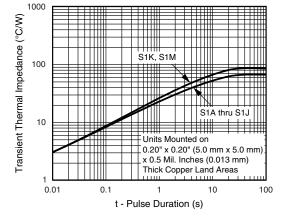
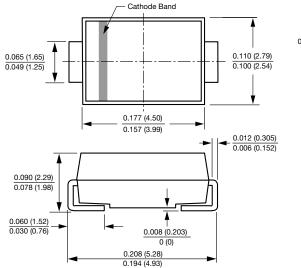


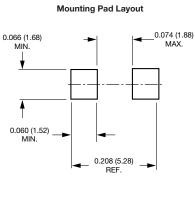
Fig. 6 - Typical Transient Thermal Impedance

rig. 4 - Typical Neverse Leakage Orial acteristics

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

SMA (DO-214AC)







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