

Vishay General Semiconductor

ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)											
PARAMETER	TEST CONDITIONS		SYMBOL	S2A	S2B	S2D	S2G	S2J	S2K	S2M	UNIT
Max. instantaneous forward voltage	1.5 A		V _F 1.15			•	V				
Max. DC reverse current at rated DC blocking voltage		T _A = 25 °C	I_	1.0 125						μА	
		T _A = 125 °C	I _R								
Typical reverse recovery time	$I_F = 0.5 \text{ A}, I_R = 1.0 \text{ A}, I_{rr} = 0.25 \text{ A}$		t _{rr}	2.0						•	μs
Typical junction capacitance	4.0 V, 1 MHz		CJ	16							рF

THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)									
PARAMETER	SYMBOL	S2A	S2B	S2D	S2G	S2J	S2K	S2M	UNIT
Typical thermal resistance (1)	$R_{\theta JA}$	53							°C/W
Typical thermal resistance (1)	$R_{\theta JL}$	16							

Note

⁽¹⁾ Thermal resistance from junction to ambient and from junction to lead mounted on PCB with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas

ORDERING INFORMATION (Example)									
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE					
S2J-E3/52T	0.096	52T	750	7" diameter plastic tape and reel					
S2J-E3/5BT	0.096	5BT	3200	13" diameter plastic tape and reel					
S2JHE3_A/H ⁽¹⁾	0.096	Н	750	7" diameter plastic tape and reel					
S2JHE3_A/I ⁽¹⁾	0.096	I	3200	13" diameter plastic tape and reel					
S2J-M3/52T	0.096	52T	750	7" diameter plastic tape and reel					
S2J-M3/5BT	0.096	5BT	3200	13" diameter plastic tape and reel					
S2JHM3_A/H ⁽¹⁾	0.096	Н	750	7" diameter plastic tape and reel					
S2JHM3_A/I (1)	0.096	I	3200	13" diameter plastic tape and reel					

Note

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

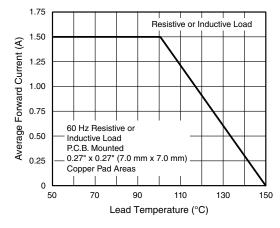


Fig. 1 - Forward Current Derating Curve

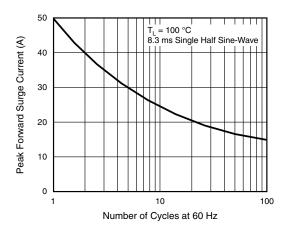


Fig. 2 - Max. Non-Repetitive Peak Forward Surge Current

⁽¹⁾ AEC-Q101 qualified

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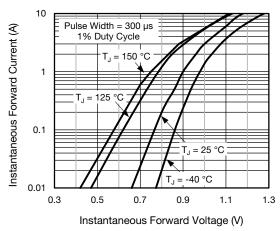


Fig. 3 - Typical Instantaneous Forward Characteristics

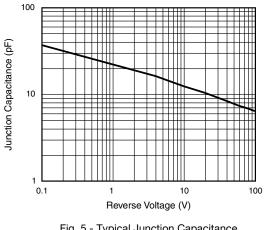


Fig. 5 - Typical Junction Capacitance

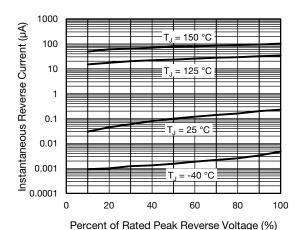


Fig. 4 - Typical Reverse Characteristics

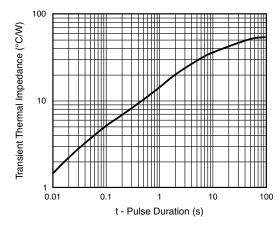
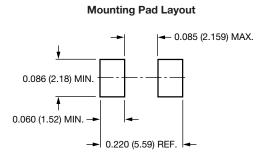


Fig. 6 - Typical Transient Thermal Impedance

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

SMB (DO-214AA) Cathode Band 0.155 (3.94) 0.086 (2.20) 0.077 (1.95) 0.130(3.30)0.180 (4.57) 0.160 (4.06) 0.012 (0.305) 0.006 (0.152) 0.096 (2.44) 0.084 (2.13) 0.060 (1.52) 0.008 (0.2) 0.030 (0.76) 0 (0) 0.220 (5.59) 0.205 (5.21)





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