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Vishay General Semiconductor

ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)									
PARAMETER	TEST CONDITIONS	SYMBOL	RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	UNIT
Maximum instantaneous forward voltage	2.5 A	V _F	1.3					V	
Maximum DC reverse current at rated DC blocking voltage	T _A = 25 °C T _A = 125 °C	- I _R	10 250					μA	
Maximum reverse recovery time	$I_F = 0.5 \text{ A}, I_R = 1.0 \text{ A}, I_{rr} = 0.25 \text{ A}$	t _{rr}	150		250	500	ns		
Typical junction capacitance	4.0 V, 1 MHz	CJ	44 34		4	pF			

THERMAL CHARACTERISTICS ($T_A = 25 \text{ °C}$ unless otherwise noted)									
PARAMETER	SYMBOL	RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	UNIT	
Typical thermal resistance	$R_{\theta JA}^{(1)}$	50							
i ypical mennal resistance	R _{0JL} ⁽¹⁾	15						°C/W	

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 area

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
RS3J-E3/57T	0.211	57T	850	7" diameter plastic tape and reel			
RS3J-E3/9AT	0.211	9AT	3500	13" diameter plastic tape and reel			
RS3JHE3_A/H ⁽¹⁾	0.211	Н	850	7" diameter plastic tape and reel			
RS3JHE3_A/I ⁽¹⁾	0.211	I	3500	13" diameter plastic tape and reel			
RS3J-M3/57T	0.211	57T	850	7" diameter plastic tape and reel			
RS3J-M3/9AT	0.211	9AT	3500	13" diameter plastic tape and reel			
RS3JHM3_A/H ⁽¹⁾	0.211	Н	850	7" diameter plastic tape and reel			
RS3JHM3_A/I ⁽¹⁾	0.211	I	3500	13" diameter plastic tape and reel			

Note

⁽¹⁾ AEC-Q101 qualified

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

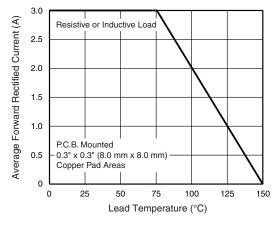


Fig. 1 - Forward Current Derating Curve

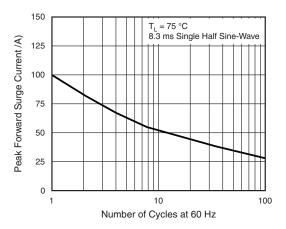


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

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RS3A, RS3B, RS3D, RS3G, RS3J, RS3K

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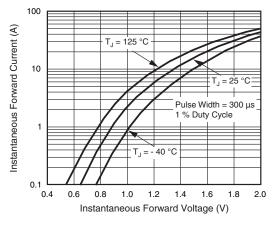
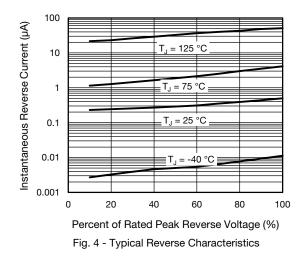
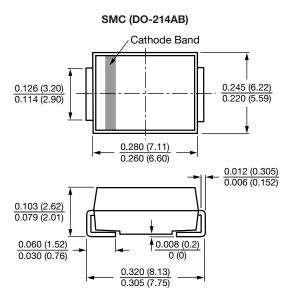


Fig. 3 - Typical Instantaneous Forward Characteristics







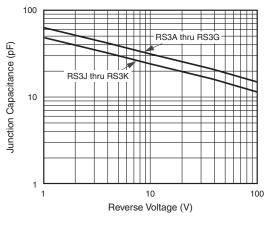


Fig. 5 - Typical Junction Capacitance

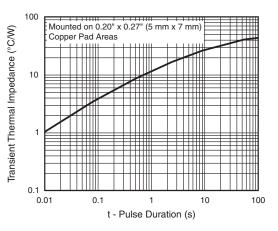
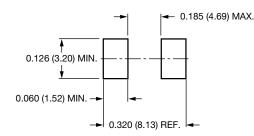


Fig. 6 - Typical Transient Thermal Impedance

Mounting Pad Layout



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