

GF1A, GF1B, GF1D, GF1G, GF1J, GF1K, GF1M

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Vishay General Semiconductor

ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)											
PARAMETER	TEST CONDITIONS		SYMBOL	GF1A	GF1B	GF1D	GF1G	GF1J	GF1K	GF1M	UNIT
Max. instantaneous forward voltage	1.0 A		V _F	1.1			1.2		V		
Max. DC reverse current at		T _A = 25 °C	_	5.0							
rated DC blocking voltage		T _A = 125 °C	I _R	50							μA
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	15						pF	

THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)									
PARAMETER	SYMBOL	GF1A	GF1B	GF1D	GF1G	GF1J	GF1K	GF1M	UNIT
Typical thermal resistance (1)	$R_{\theta JA}$	80							°C/W
Typical thermal resistance (1)	$R_{\theta JL}$	26							

Note

⁽¹⁾ Thermal resistance from junction to ambient and from junction to lead, PCB mounted on 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				
GF1J-E3/67A	0.104	67A	1500	7" diameter plastic tape and reel				
GF1J-E3/5CA	0.104	5CA	6500	13" diameter plastic tape and reel				
GF1JHE3/67A (1)	0.104	67A	1500	7" diameter plastic tape and reel				
GF1JHE3/5CA (1)	0.104	5CA	6500	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)

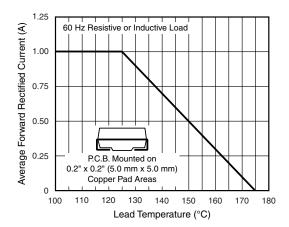


Fig. 1 - Forward Current Derating Curve

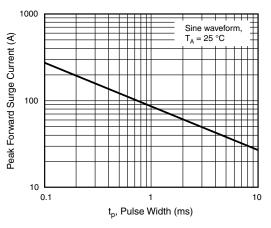


Fig. 2 - Non-Repetitive Peak Forward Surge Current

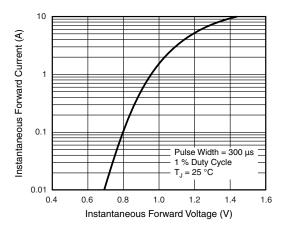


Fig. 3 - Typical Instantaneous Forward Characteristics

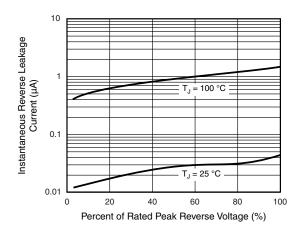


Fig. 4 - Typical Reverse Characteristics

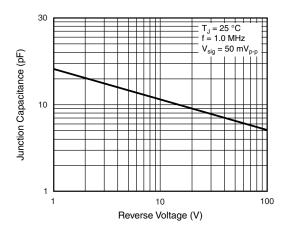


Fig. 5 - Typical Junction Capacitance

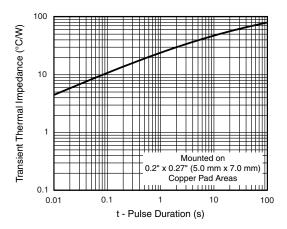


Fig. 6 - Typical Transient Thermal Impedance



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PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

GF1 (DO-214BA) Cathode Band **Mounting Pad Layout** 0.076 (1.93) 0.066 (1.68) 0.066 (1.68) MAX. 0.040 (1.02) MIN. 0.187 (4.75) 0.167 (4.24) 0.015 (0.38) 0.0065 (0.17) 0.060 (1.52) MIN. 0.108 (2.74) 0.118 (3.00) 0.098 (2.49) 0.100 (2.54) 0.220 (5.58) REF. 0.114 (2.90) 0.006 (0.152) TYP. 0.060 (1.52) 0.094 (2.39) 0.030 (0.76) 0.226 (5.74) 0.196 (4.98)



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