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

## Vishay General Semiconductor



<b>ELECTRICAL CHARACTERISTICS</b> (T <sub>A</sub> = 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 <sub>F</sub>	1.1 1.2			.2	V			
Max. DC reverse current at		T <sub>A</sub> = 25 °C	l <sub>o</sub>	5.0							μΑ
rated DC blocking voltage		T <sub>A</sub> = 125 °C	IR	50							
Typical reverse recovery time	$I_F = 0.5 \text{ A}, I_R = 1.0 \text{ A}, I_{rr} = 0.25 \text{ A}$		t <sub>rr</sub>	2.0						μs	
Typical junction capacitance	4.0 V, 1 MHz		CJ	15							рF

THERMAL CHARACTERISTICS (T <sub>A</sub> = 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 (9)	$R_{\theta JL}$	26							

#### Note

<sup>(1)</sup> 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_A/H (1)	0.104	Н	1500	7" diameter plastic tape and reel				
GF1JHE3_A/I (1)	0.104	I	6500	13" diameter plastic tape and reel				

#### Note

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

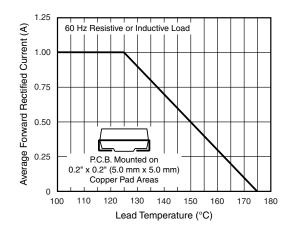


Fig. 1 - Forward Current Derating Curve

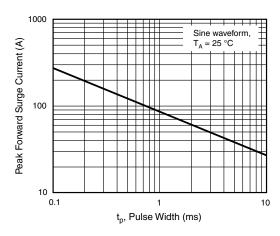


Fig. 2 - Non-Repetitive Peak Forward Surge Current

<sup>(1)</sup> AEC-Q101 qualified

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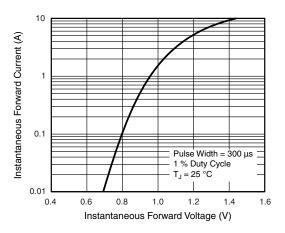


Fig. 3 - Typical Instantaneous Forward Characteristics

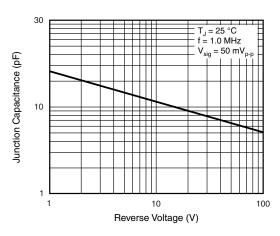


Fig. 5 - Typical Junction Capacitance

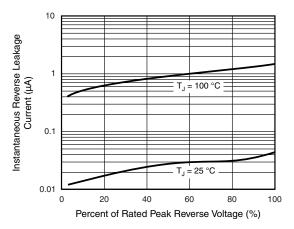


Fig. 4 - Typical Reverse Characteristics

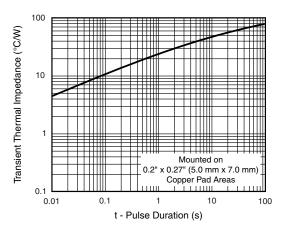
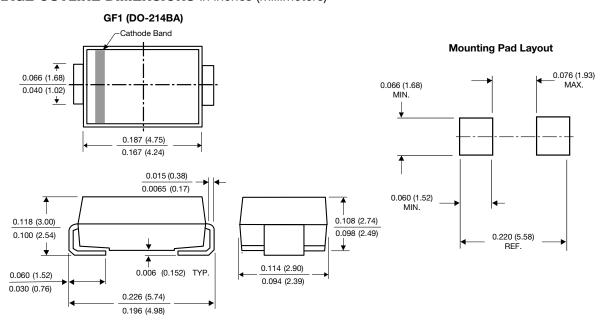


Fig. 6 - Typical Transient Thermal Impedance

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





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