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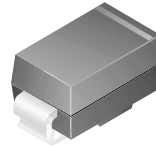


GF1A - GF1M

GF1A-GF1M

Features

- Low forward voltage drop.
- High current capability.
- Easy pick and place.
- High surge current capability.



SMA/DO-214AC
COLOR BAND DENOTES CATHODE

General Purpose Rectifiers (Glass Passivated)

Absolute Maximum Ratings* T_A = 25°C unless otherwise noted

Symbol	Parameter	Value							Units
		1A	1B	1D	1G	1J	1K	1M	
V _{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
I _{F(AV)}	Average Rectified Forward Current, @ T _L = 125°C	1.0							A
I _{FSM}	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	30							A
T _{stg}	Storage Temperature Range	-65 to +175							°C
T _J	Operating Junction Temperature	-65 to +175							°C

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics

Symbol	Parameter	Value	Units
P _D	Power Dissipation	1.8	W
R _{θJA}	Thermal Resistance, Junction to Ambient*	80	°C/W
R _{θJL}	Thermal Resistance, Junction to Lead*	26	°C/W

*Device mounted on PCB with 0.2 x 0.2" (5.0 x 5.0 mm) copper pad areas.

Electrical Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter	Device							Units
		1A	1B	1D	1G	1J	1K	1M	
V _F	Forward Voltage @ 1.0 A	1.0					1.2		V
t _{rr}	Reverse Recovery Time I _F = 0.5 A, I _R = 1.0 A, I _{rr} = 0.25 A	2.0							μs
I _R	Reverse Current @ rated V _R T _A = 25°C T _A = 125°C	5.0					50		μA
C _T	Total Capacitance V _R = 4.0 V, f = 1.0 MHz	15							pF

Typical Characteristics



Figure 1. Forward Current Derating Curve

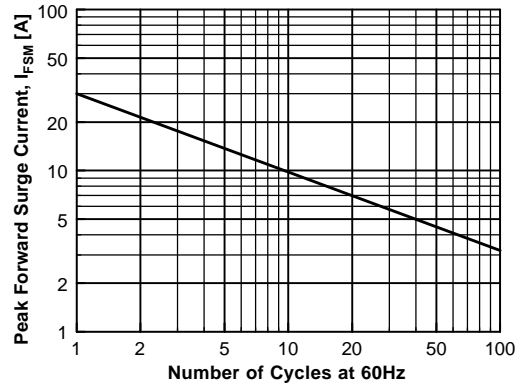


Figure 2. Non-Repetitive Surge Current

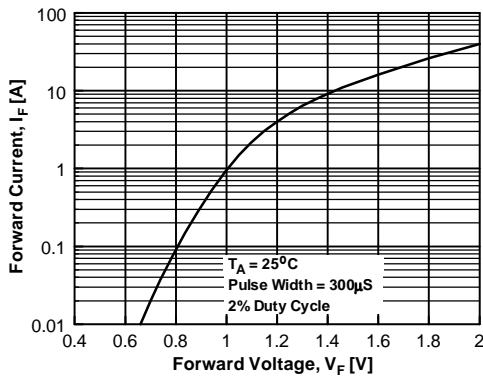


Figure 3. Forward Voltage Characteristics

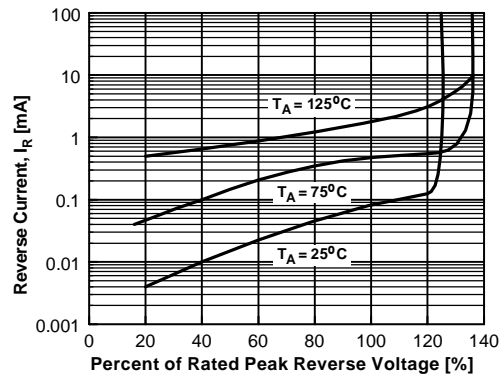


Figure 4. Reverse Current vs Reverse Voltage

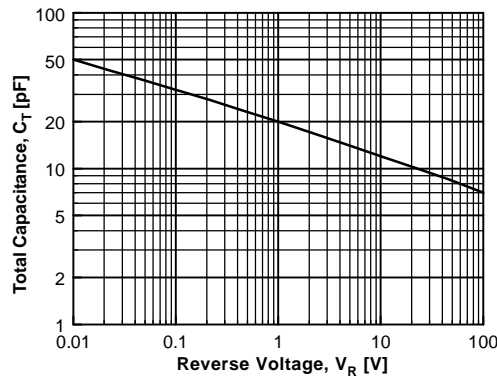


Figure 5. Total Capacitance

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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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