

GF1A - GF1M

PRV : 50 - 1000 Volts
Io : 1.0 Ampere

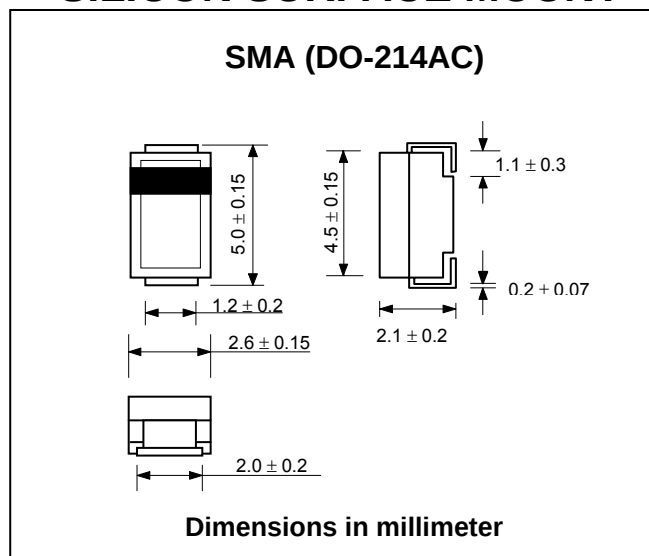
FEATURES :

- * Glass passivated chip
- * High current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : SMA Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.067 gram

GLASS PASSIVATED JUNCTION SILICON SURFACE MOUNT



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specific.
 Single phase, half wave, 60 Hz, resistive or inductive load
 For capacitive load, derate current by 20%

RATING	SYMBOL	GF1A	GF1B	GF1D	GF1G	GF1J	GF1K	GF1M	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current $T_a = 75\text{ }^{\circ}\text{C}$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Maximum Forward Voltage at $I_F = 1.0\text{ Amp.}$	V_F	1.0							V
Maximum DC Reverse Current $T_a = 25\text{ }^{\circ}\text{C}$ at rated DC Blocking Voltage $T_a = 100\text{ }^{\circ}\text{C}$	I_R	5.0							μA
	$I_{R(H)}$	50							μA
Typical Reverse Recovery Time (Note 1)	T_{rr}	2.0							μs
Typical Junction Capacitance (Note2)	C_J	8							pF
Junction Temperature Range	T_J	- 65 to + 150							$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	- 65 to + 150							$^{\circ}\text{C}$

Notes :

- (1) Reverse Recovery Test Conditions : $I_F = 0.5\text{ A}$, $I_R = 1.0\text{ A}$, $I_{rr} = 0.25\text{ A}$.
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Vdc

RATING AND CHARACTERISTIC CURVES (GF1A - GF1M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

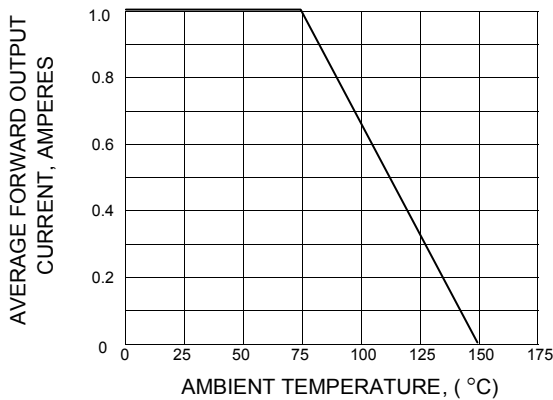


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

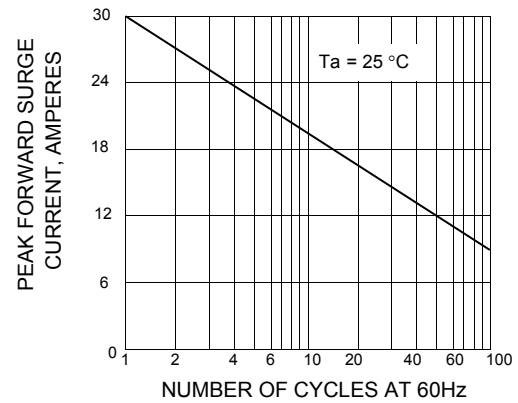


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

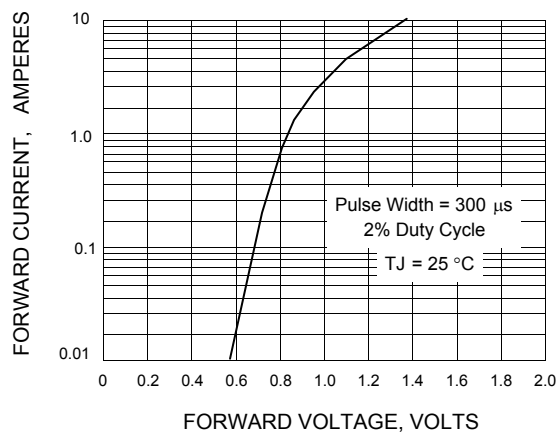


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

