

# GROA\_M

PRV : 50 - 1000 Volts

Io : 1.5 Amperes

### Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Fast switching for high efficiency
- RoHS compliant package

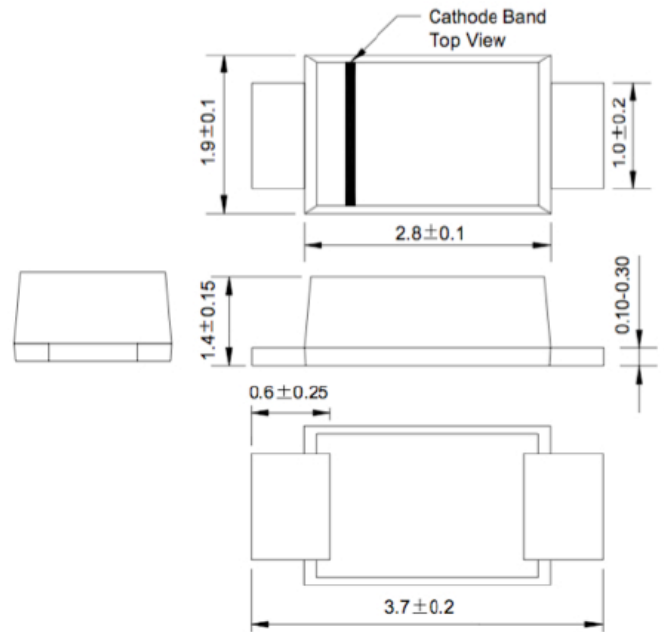
### Mechanical Data

- 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 : 0.063 gram

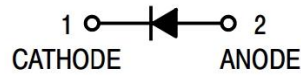
### Packing & Order Information

3,000/Reel

### SOD-123FL



### Graphic symbol



**RoHS**  
COMPLIANT

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

Rating	Symbol	GROA	GROB	GROD	GROG	GROJ	GROK	GROM	Unit
Maximum Recurrent 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 $T_c = 50^\circ\text{C}$	$I_{F(AV)}$	1.5							A
Maximum Peak Forward Voltage at $I_F = 1.5$ A	$V_F$	1.3							V

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Rating	Symbol	GROA	GROB	GROD	GROG	GROJ	GROK	GROM	Unit
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave superimposed on rated load (JEDEC Method)	$I_{FSM}$				50				V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$	$I_R$				5				$\mu\text{A}$
at Rated DC Blocking Voltage $T_a = 100^\circ\text{C}$	$I_{R(H)}$				100				$\mu\text{A}$
Typical Junction capacitance (Note 2)	$C_J$				30				pF
Junction temperature range	$T_J$				-65 to +150				$^\circ\text{C}$
Storage temperature range	$T_{STG}$				-65 to +150				$^\circ\text{C}$

**NOTE:**

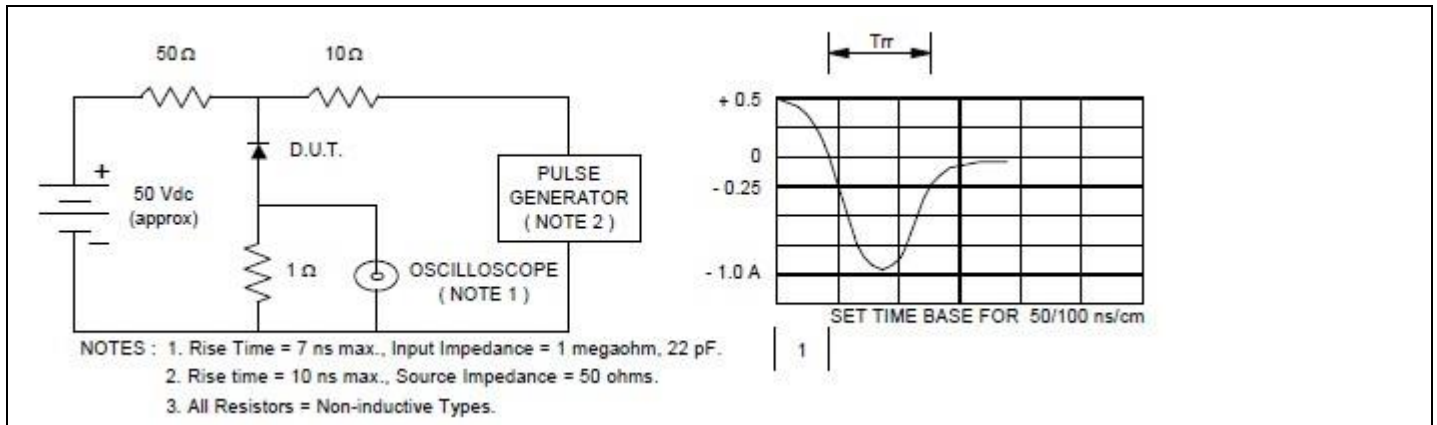
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC

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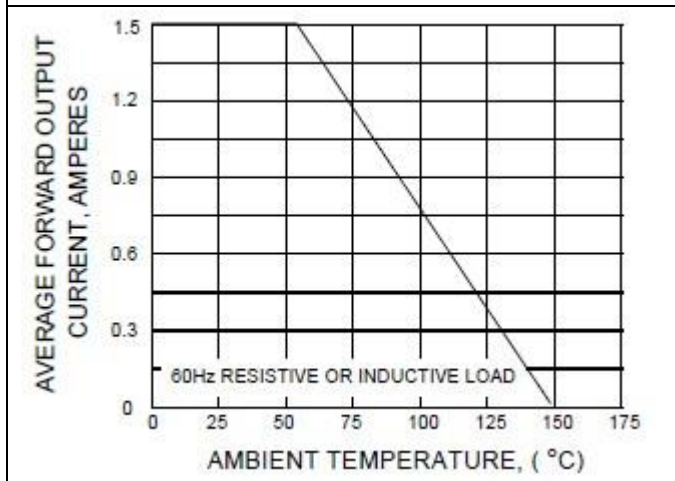
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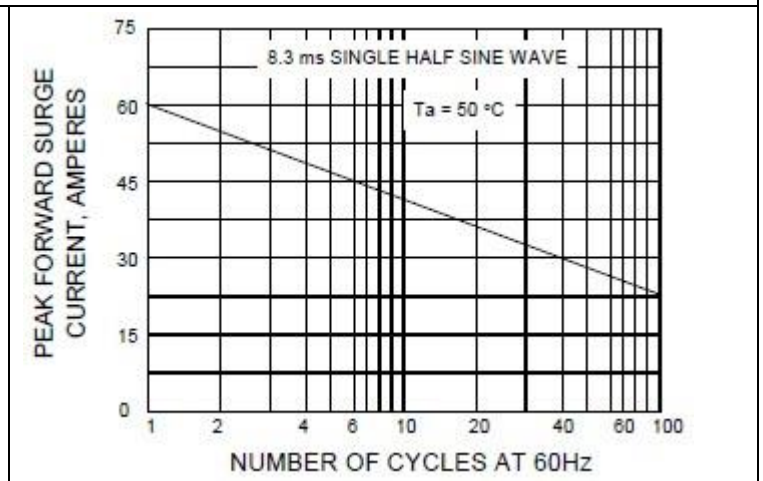
### ■ RATING AND CHARACTERISTIC CURVES ( GROA - GROM )



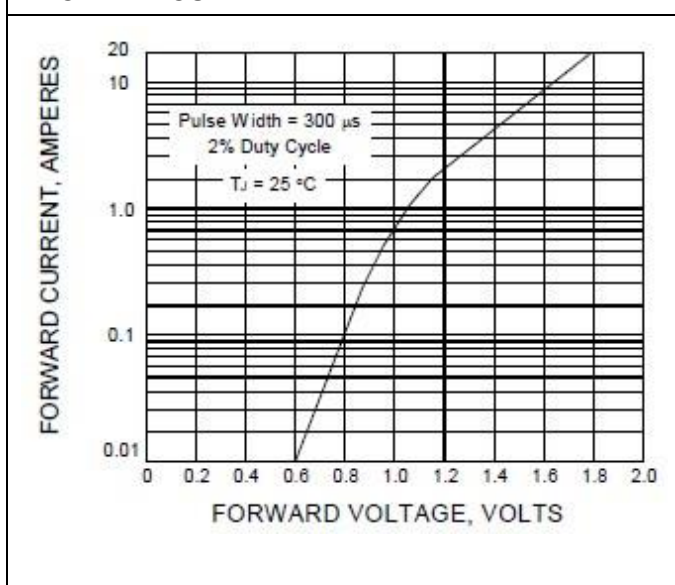
**FIG.1 –REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



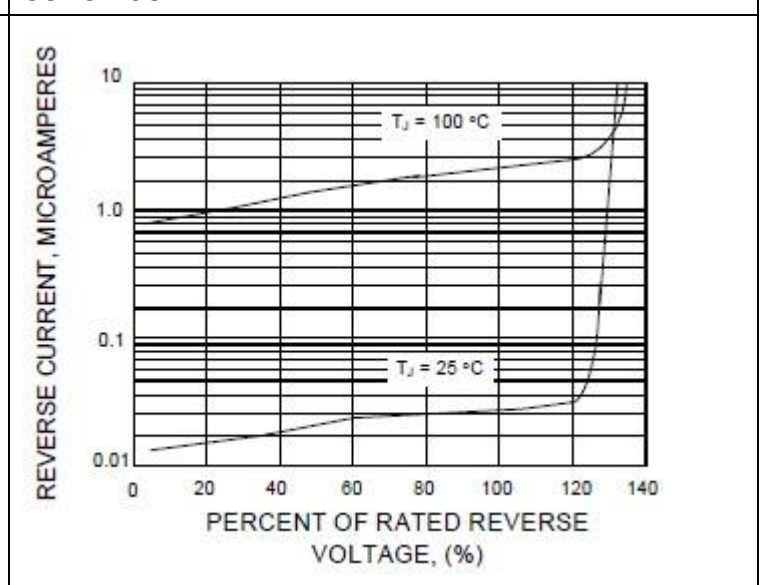
**FIG.2 – DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.3 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

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