



GROA THRU GROM

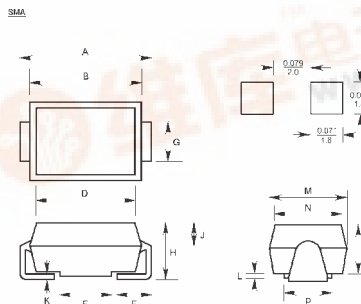
SURFACE MOUNT GLASS PASSIVATED JUNCTION FAST SWITCHING RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 1.5 Amperes

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mount applications
- Low profile package
- Built-in strain relief, ideal for automated placement
- Glass passivated chip junction
- Fast switching for high efficiency
- High temperature soldering:
250°C/10 seconds at terminals



Mechanical Data

- **Case:** SMA molded plastic over passivated chip
- **Terminals:** Solder plated solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode band end
- **Weight:** 0.004 ounce, 0.118 gram

DIMENSIONS					
DIM	inches		mm		Note
	Min.	Max.	Min.	Max.	
A	0.216	0.226	5.48	5.74	
B	0.176	0.182	4.48	4.63	
C	0.094	0.100	2.40	2.55	
D	0.170	0.176	4.33	4.48	
E	0.039	0.055	1.00	1.40	
F	0.080	0.081	2.03	2.07	
G	0.068	0.083	1.72	2.10	
H	0.112	0.118	2.85	3.00	
J	0.057	-	1.44	-	
K	-	0.018	-	0.45	
L	0.016	-	0.40	-	
M	0.109	0.115	2.77	2.93	
N	0.105	0.107	2.67	2.73	
P	0.078	0.081	2.00	2.05	

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

	Symbols	GROA	GROB	GROD	GROG	GROJ	GROK	GROM	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at $T_J=100^{\circ}\text{C}$	$I_{(AV)}$	1.5							Amps
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method)	I_{FSM}	50.0							Amps
Maximum instantaneous forward voltage at 1.5A	V_F	1.30							Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^{\circ}\text{C}$ $T_A=125^{\circ}\text{C}$	I_R	5.0 200.0							μA
Maximum reverse recovery time (Note 1)	T_{rr}	150				250	500		nS
Typical junction capacitance (Note 2)	C_J	50.0							μF
Typical thermal resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	55.0 18.0							$^{\circ}\text{C/W}$
Operating Junction and storage temperature range	T_J, T_{STG}	-55 to +150							$^{\circ}\text{C}$

Notes:

(1) Reverse recovery test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $t_F=0.25\text{A}$

(2) Measured at 1.0MHz and applied reverse voltage of 4.0 volts

(3) Thermal resistance from junction to ambient and junction to lead P.C.B. mounted on 0.27X0.27" (7.0X7.0mm) copper pad areas



RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT DERATING CURVE

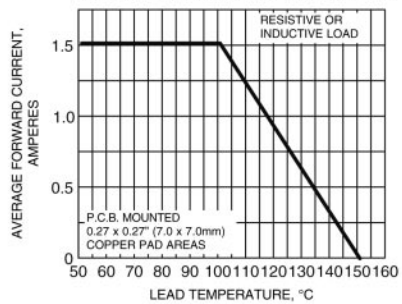


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

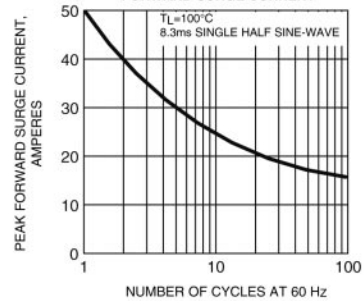


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

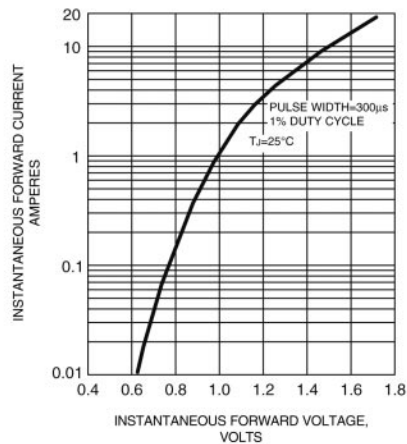


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

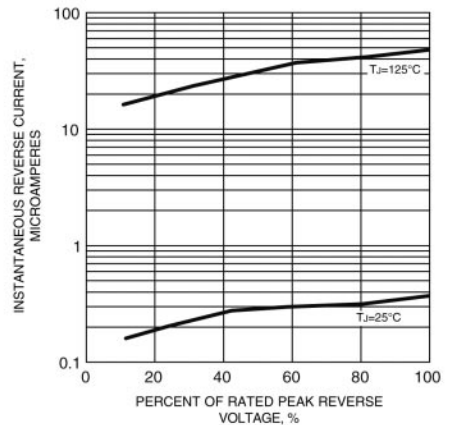


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

