

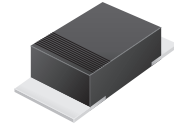
SMD Ultra Fast Recovery Rectifier



SMD Diodes Specialist

CURM101-G Thru CURM107-G

Reverse Voltage: 50 - 1000 Volts
Forward Current: 1.0 Amp

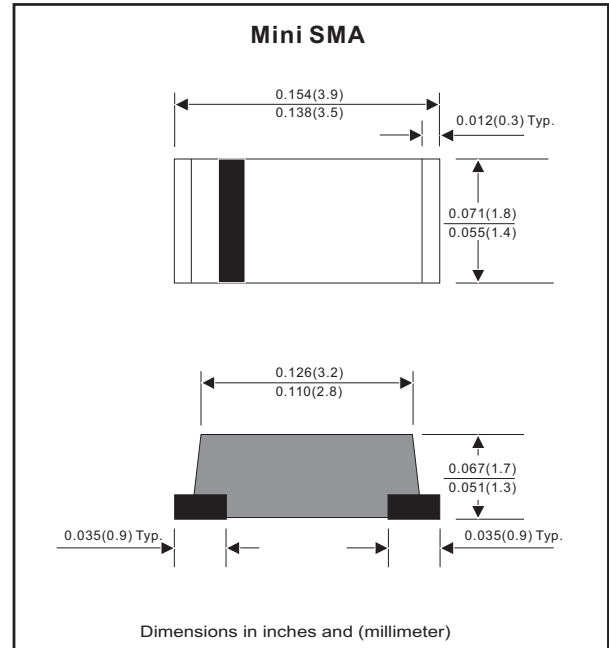


Features

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. flammability classification 94V-0
- Exceeds environmental standard MIL-S-19500/228
- Low leakage current

Mechanical data

- Case: Mini SMA/SOD-123 molded plastic
- Terminals: solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Approx. Weight: 0.04 gram



Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CURM 101-G	CURM 102-G	CURM 103-G	CURM 104-G	CURM 105-G	CURM 106-G	CURM 107-G	Unit
Max. Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Max. DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Max. RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Peak Surge Forward Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	IFSM	30							A
Max. Average Forward Current	Io	1.0							A
Max. Instantaneous Forward Current at 1.0 A	VF	1.0			1.3	1.7			V
Reverse recovery time	Trr	50				75			nS
Max. DC Reverse Current at Rated DC Blocking Voltage Ta=25°C Ta=100°C	IR	5.0 150							uA
Typical. Thermal Resistance (Note 1)	RθJA	42							°C/W
Operating Junction Temperature	Tj	-55 to +150							°C
Storage Temperature	TSTG	-55 to +150							°C

Note 1: Thermal resistance from junction to ambient.

Rev. A

Rating and Characteristic Curves (CURM101-G Thru CURM107-G)

Fig.1 - Forward Characteristics

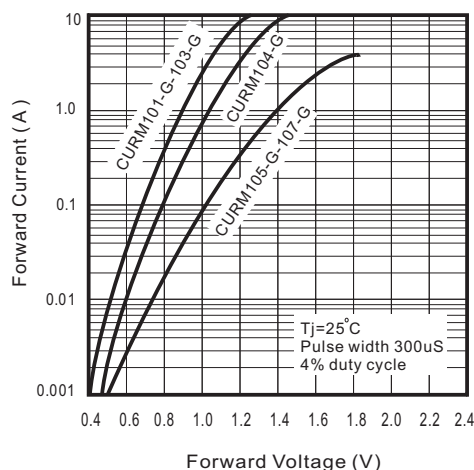


Fig.2 - Junction Capacitance

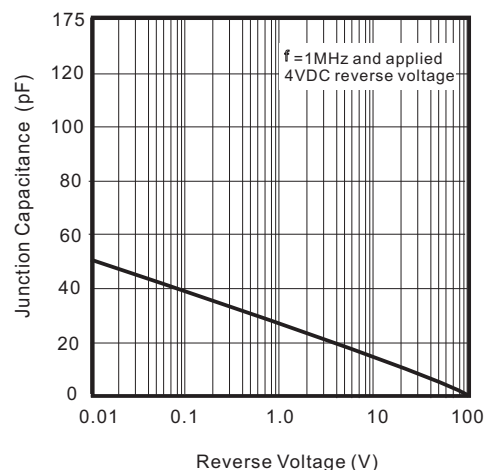
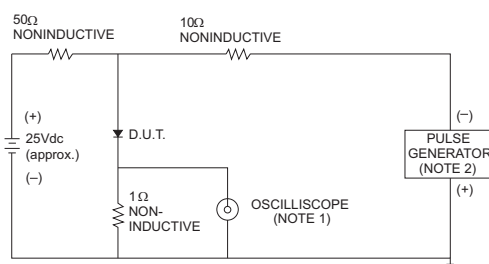


Fig. 3 - Test Circuit Diagram and Reverse Recovery Time Characteristics



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm, 22pF.
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

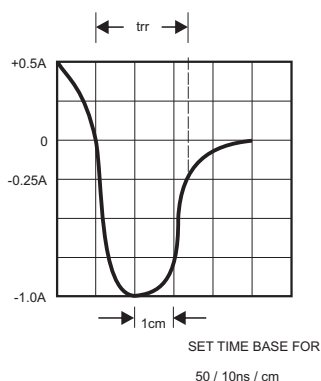


Fig. 4 - Non Repetitive Forward Surge Current

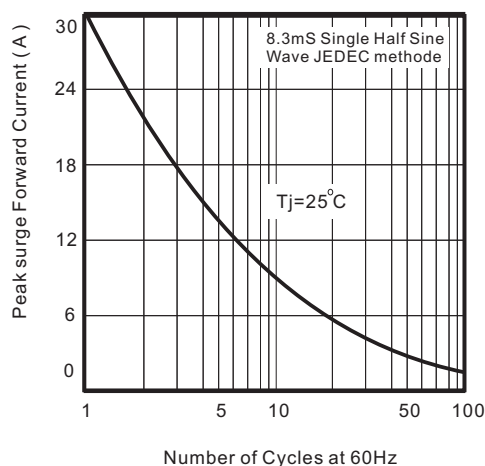


Fig. 5 - Current Derating Curve

