

CURL101 Thru CURL107

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

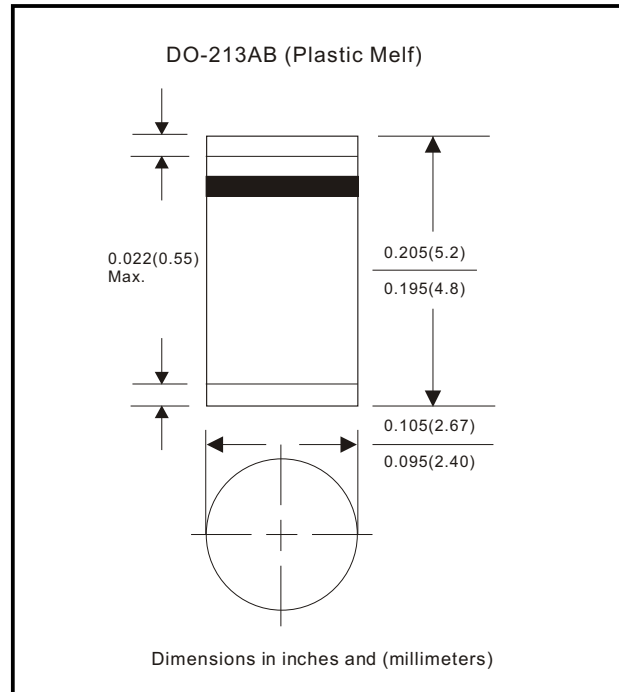


Features

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. flammability classification 94V-0
- Ultra fast recovery time: 50 - 75 nS
- Low leakage current

Mechanical data

- Case: DO-213AB molded plastic
- Terminals: solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Approx. Weight: 0.116 gram



Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CURL 101	CURL 102	CURL 103	CURL 104	CURL 105	CURL 106	CURL 107	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 halfsine-wave superimposed on ratieload (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	5.0 100							uA
Max. Thermal Resistance (Note 1)	RθJA	60							°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.

Rating and Characteristic Curves (CURL101 Thru CURL107)

Fig. 1 - Reverse Characteristics

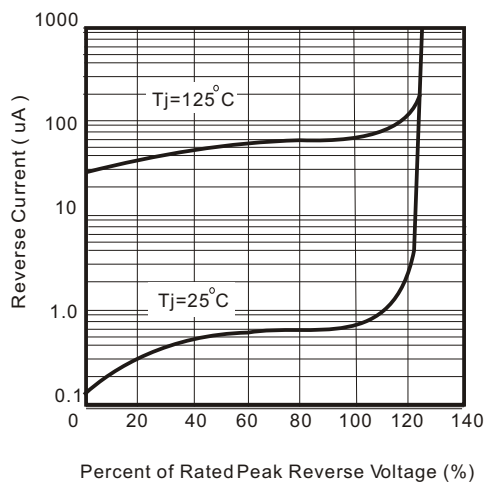


Fig.2 - Forward Characteristics

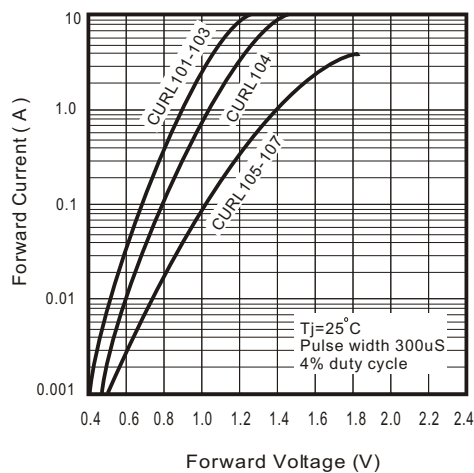


Fig. 3 - Junction Capacitance

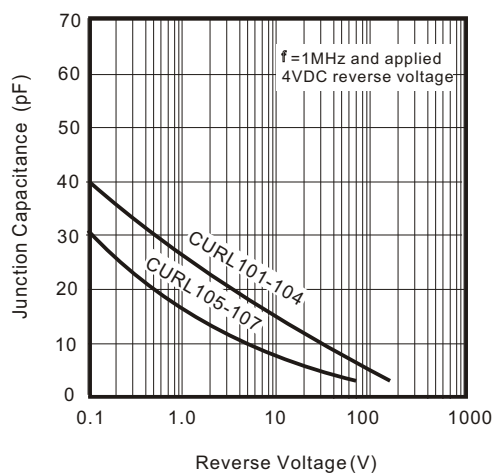


Fig. 4 - Non Repetitive Forward Surge Current

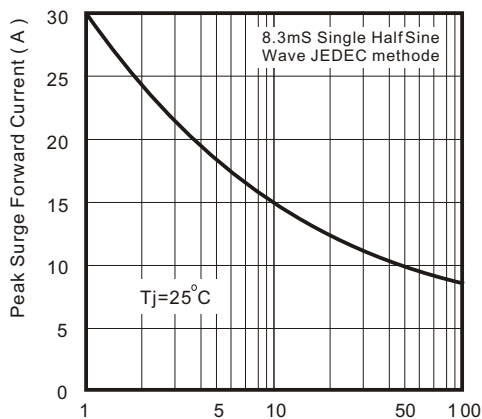
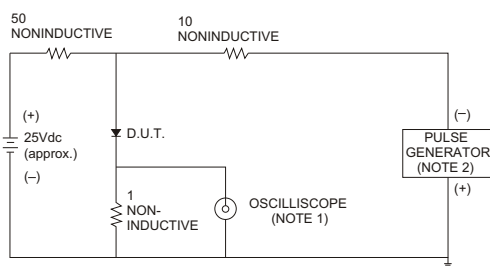


Fig. 5 - Test Circuit Diagram and Reverse Recovery Time Characteristics



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

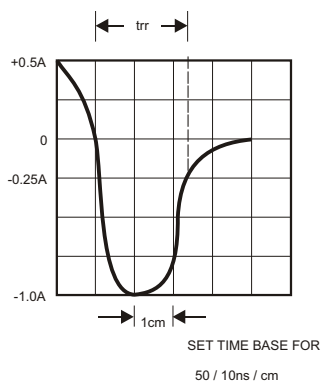


Fig. 6 - Current Derating Curve

