

CFRL101 Thru CFRL107

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

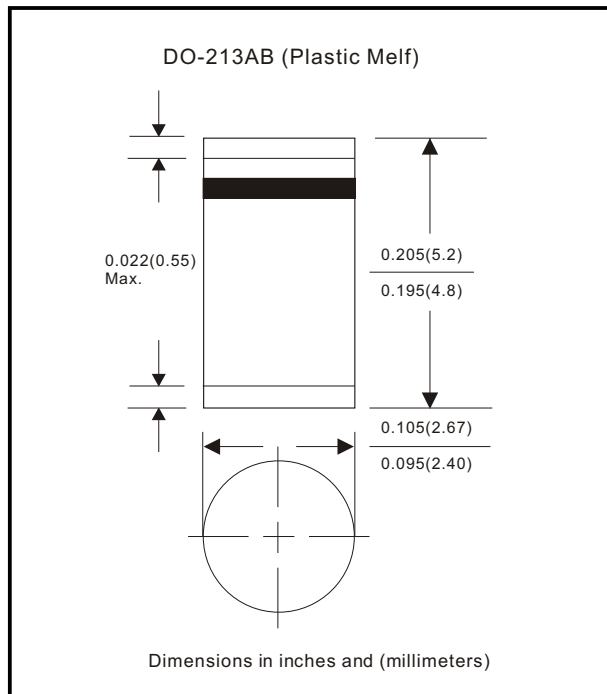


Features

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. flammability classification 94V-0
- Fast recovery time: 150 - 500 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	CFRL 101	CFRL 102	CFRL 103	CFRL 104	CFRL 105	CFRL 106	CFRL 107	Unit
Max. Repetitive PeakReverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Max. DC BlockingVoltage	VDC	50	100	200	400	600	800	1000	V
Max. RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Peak Surge ForwardCurrent 8.3ms single halfsine-wave superimposed on rateload (JEDEC method)	IFSM	30							A
Max. Average Forward Current	I o	1.0							A
Max. Instantaneous Forward Current at 1.0 A	V F	1.3							V
Reverse recovery time	Trr	100				250	500		nS
Max. DC Reverse Current at Rated DC Blocking Voltage Ta=25°C Ta=100°C	I R	5.0 50							uA
Max. Thermal Resistance (Note 1)	RθJA	42							°C/W
Operating Junction Temperature	T j	-55 to +150							°C
Storage Temperature	TSTG	-55 to +150							°C

Note 1: Thermal resistance from junction to ambient.

Rating and Characteristic Curves (CFRL101 Thru CFRL107)

Fig. 1 - Reverse Characteristics

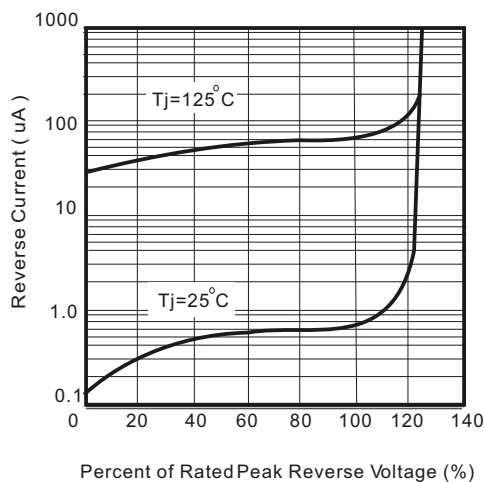


Fig.2 - Forward Characteristics

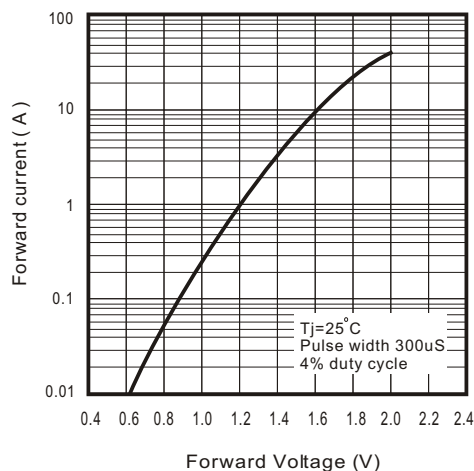


Fig. 3 - Junction Capacitance

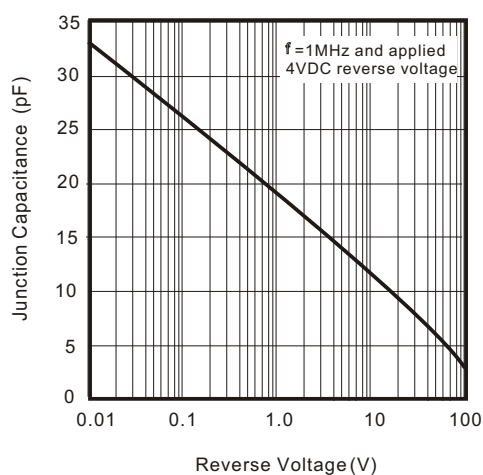


Fig. 4 - Non Repetitive Forward Surge Current

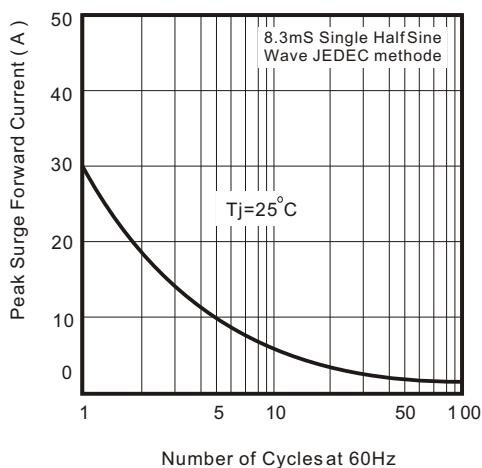
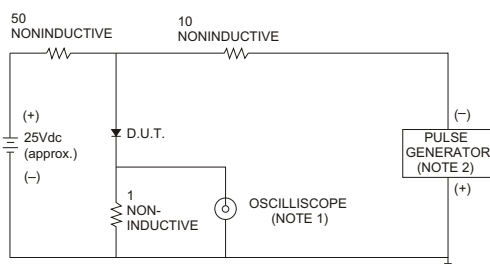


Fig. 5 - Test Circuit Diagram and Reverse Recovery Time Characteristics



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

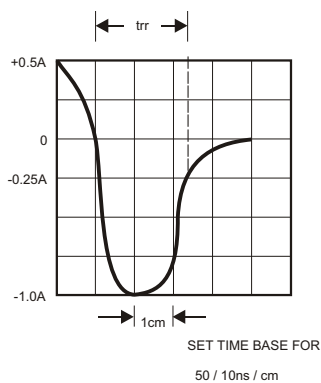


Fig. 6 - Current Derating Curve

