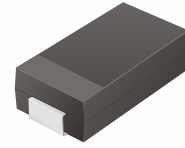


SMD Fast Recovery Rectifier



CFRA101 Thru CFRA107

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

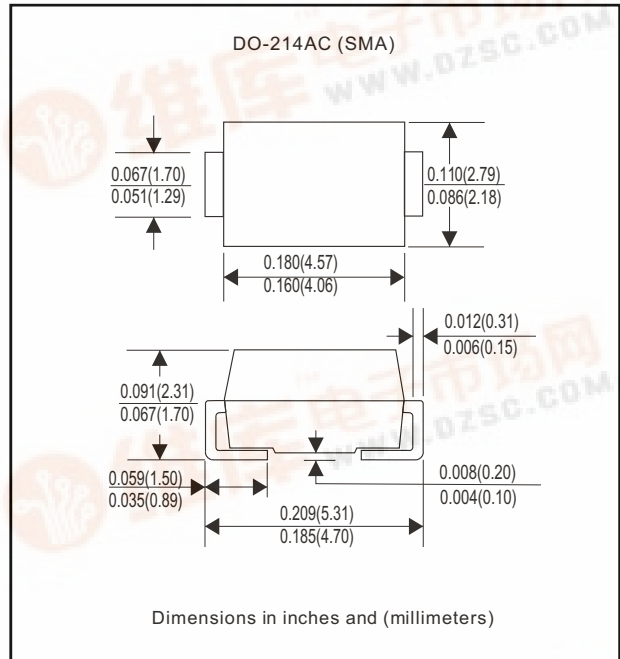


Features

- 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: 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	CFRA 101	CFRA 102	CFRA 103	CFRA 104	CFRA 105	CFRA 106	CFRA 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 rate load (JEDEC method)	IFSM	30							A	
Max. Average Forward Current	Io	1.0							A	
Max. Instantaneous Forward Current at 1.0 A	VF	1.3							V	
Reverse recovery time	Trr	100			250		500		nS	
Max. DC Reverse Current at Rated DC Blocking Voltage Ta=25°C Ta=100°C	IR	5.0				50				uA
Max. 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.

Rating and Characteristic Curves (CFRA101 Thru CFRA107)

Fig. 1 - Reverse Characteristics

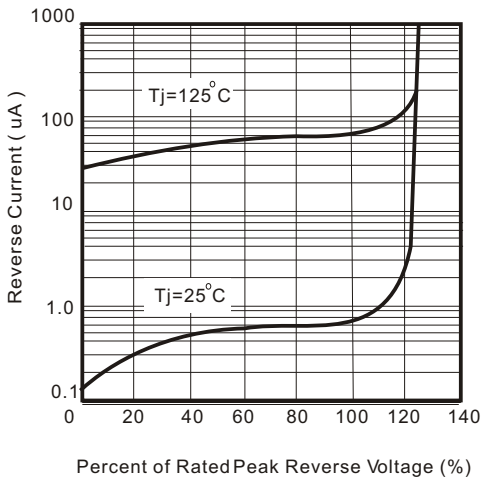


Fig.2 - Forward Characteristics

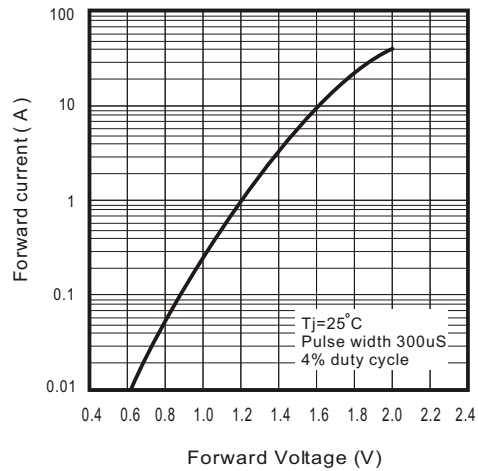


Fig. 3 - Junction Capacitance

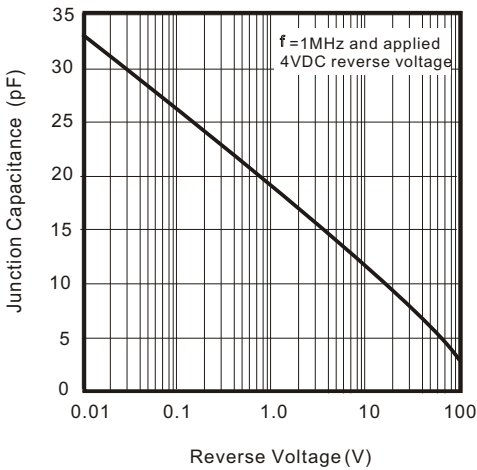


Fig. 4 - Non Repetitive Forward Surge Current

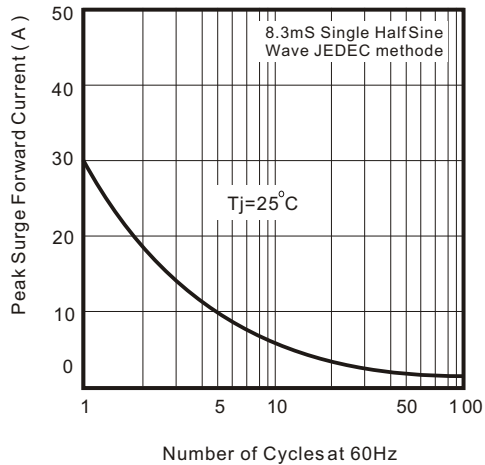


Fig. 5 - Test Circuit Diagram and Reverse Recovery Time Characteristics

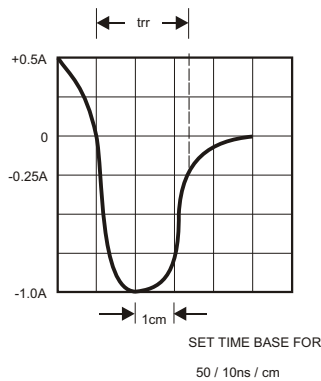
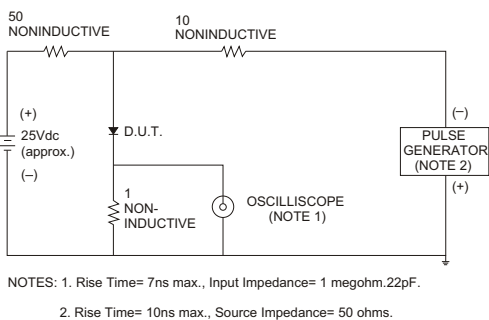


Fig. 6 - Current Derating Curve

