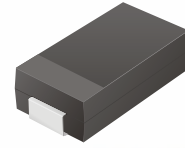


SMD Fast Recovery Rectifier



CFRC301 Thru CFRC307

Reverse Voltage: 50 - 1000 Volts
Forward Current: 3.0 Amp

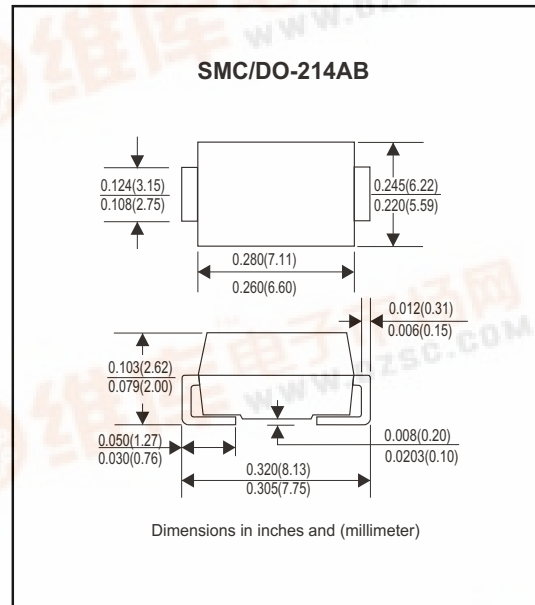


Features

- 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: JEDEC DO-214AB molded plastic
- Terminals: solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Approx. Weight: 0.21 gram



Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CFRC 301	CFRC 302	CFRC 303	CFRC 304	CFRC 305	CFRC 306	CFRC 307	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	100							A
Max. Average Forward Current	Io	3.0							A
Max. Instantaneous Forward Current at 3.0 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	50							°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 (CFRC301 Thru CFRC307)

Fig. 1 - Reverse Characteristics

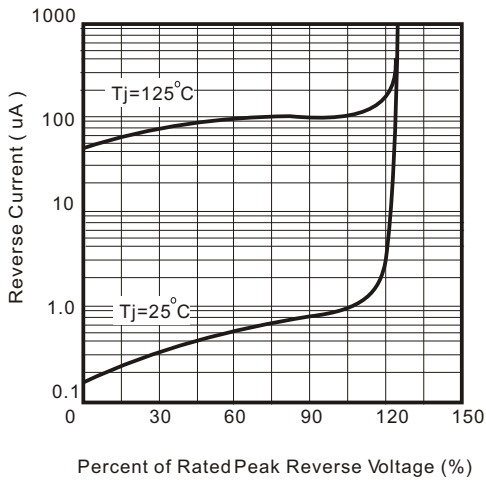


Fig.2 - Forward Characteristics

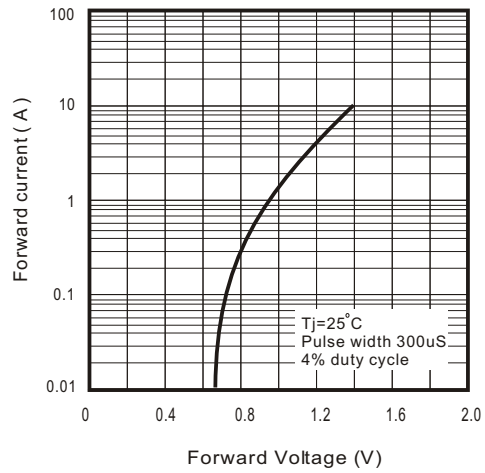


Fig. 3 - Junction Capacitance

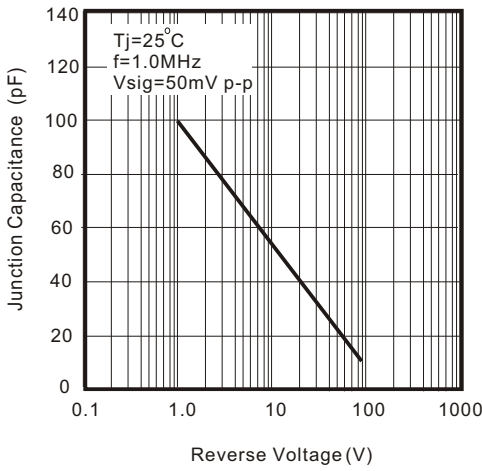


Fig. 4 - Non Repetitive Forward Surge Current

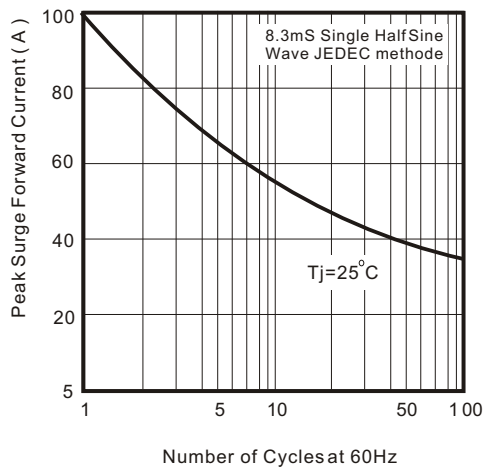


Fig. 5 - Test Circuit Diagram and Reverse Recovery Time Characteristics

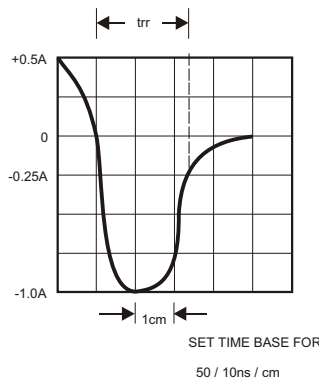
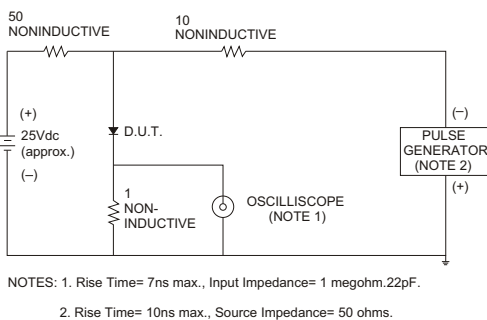


Fig. 6 - Current Derating Curve

