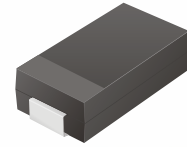


# SMD Super Fast Recovery Rectifier



## CSFC301 Thru CSFC305

Reverse Voltage: 50 - 600 Volts  
Forward Current: 3.0 Amp

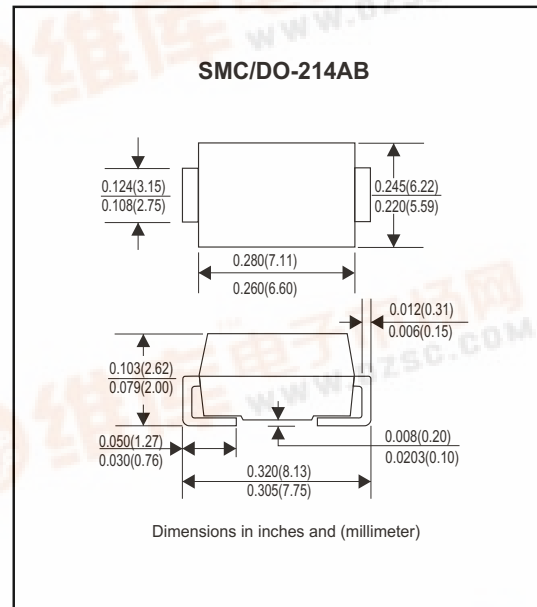


### Features

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. flammability classification 94V-0
- Super fast recovery time 35-50 nS
- Built-in strain relief
- Low forward voltage drop

### Mechanical Data

- Case: JEDEC DO-214AC 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	CSFC 301	CSFC 302	CSFC 303	CSFC 304	CSFC 305	Unit
Max. Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	V
Max. DC Blocking Voltage	VDC	50	100	200	400	600	V
Max. RMS Voltage	VRMS	35	70	140	280	420	V
Peak Surge Forward Current 8.3ms single halfsine-wave superimposed on rateload ( JEDEC method )	IFSM	100					A
Max. Average Forward Current	Io	3.0					A
Max. Instantaneous Forward Current at 3.0 A	VF	0.95		1.3		1.5	V
Reverse recovery time	Trr	35				50	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)	RθJL	16					°C/W
Operating Junction Temperature	Tj	-55 to +150					°C
Storage Temperature	TSTG	-55 to +150					°C



Note 1: The thermal resistance from junction to lead, 8.0x8.0mm square (0.13mm thick) land areas.

## Rating and Characteristic Curves (CSFC301 Thru CSFC305)

Fig. 1 - Reverse Characteristics

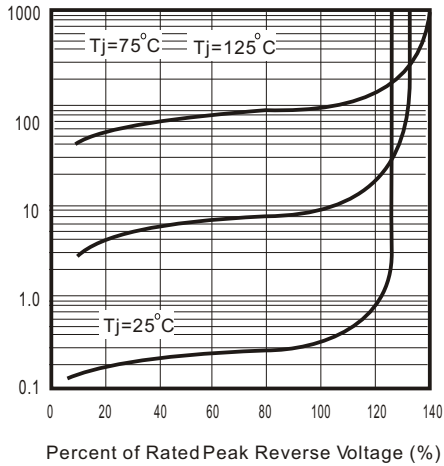


Fig.2 - Forward Characteristics

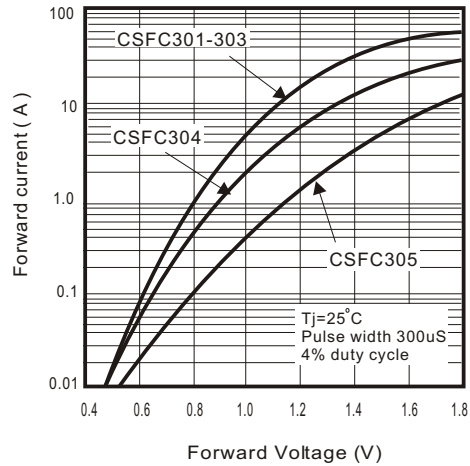


Fig. 3 - Junction Capacitance

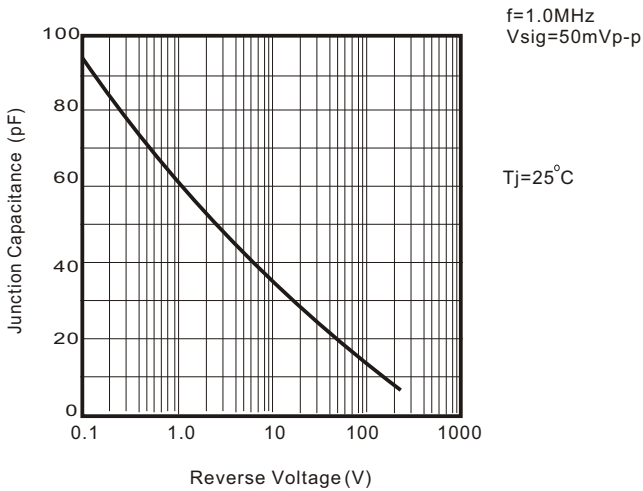


Fig. 4 - Non Repetitive Forward Surge Current

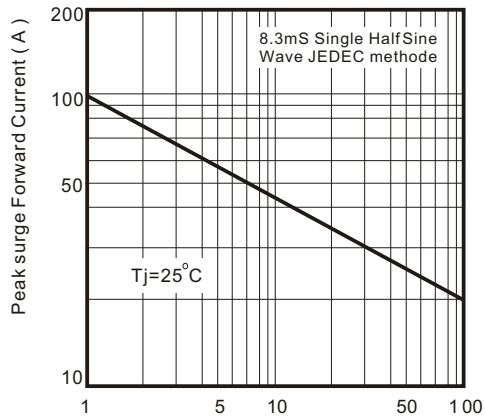


Fig. 5 - Test Circuit Diagram and Reverse Recovery Time Characteristics

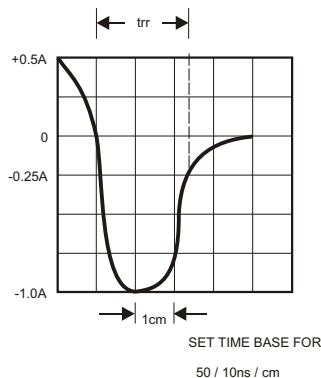
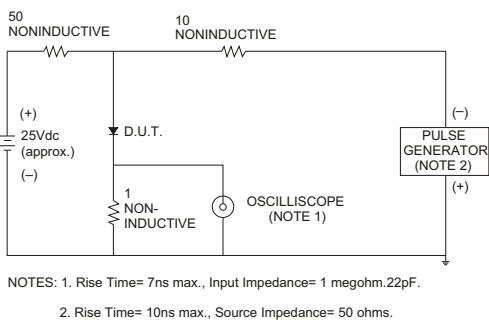


Fig. 6 - Current Derating Curve

