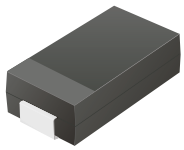
CSFC301-G Thru. CSFC305-G

Reverse Voltage: 50 to 600 Volts
Forward Current: 3.0 Amp
RoHS Device



Features

-Ideal for surface mount applications.

-Easy pick and place.

-Plastic package has Underwriters Lab. flammability classification 94V-0.

-Super fast recovery time 35nS.

-Built-in strain relief.

-Low forward voltage drop.

Mechanical data

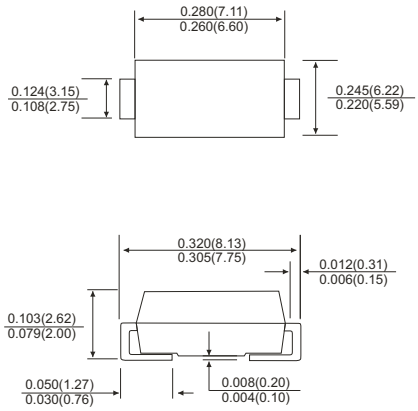
-Case: JEDEC DO-214AC, molded plastic.

-Terminals: solderable per MIL-STD-750, method 2026.

-Polarity: Color band denotes cathode end.

-Approx. weight: 0.21 grams

DO-214AB (SMC)



Dimensions in inches and (millimeter)

Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CSFC301-G	CSFC302-G	CSFC303-G	CSFC304-G	CSFC305-G	Units
Max. repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	V
Max. DC blocking voltage	V_{DC}	50	100	200	400	600	V
Max. RMS voltage	V_{RMS}	35	70	140	280	420	V
Peak surge forward current, 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	100					A
Max. average forward current	I_O	3.0					A
Max. instantaneous forward voltage at 3.0A	V_F	0.95			1.25	1.3	V
Reverse recovery time	T_{rr}	35				50	nS
Max. DC reverse current at T_A=25 °C rated DC blocking voltage T_A=100 °C	I_R	5.0 250					μA
Max. thermal resistance (Note 1)	$R_{\theta JL}$	16					°C/W
Max. operating junction temperature	T_J	150					°C
Storage temperature	T_{STG}	-55 to +150					°C

Notes: 1. Thermal resistance from junction to lead mounted on P.C.B. with 8.0×8.0 mm copper pad area.

RATING AND CHARACTERISTIC CURVES (CSFC301-G thru CSFC305-G)

Fig.1 Reverse Characteristics

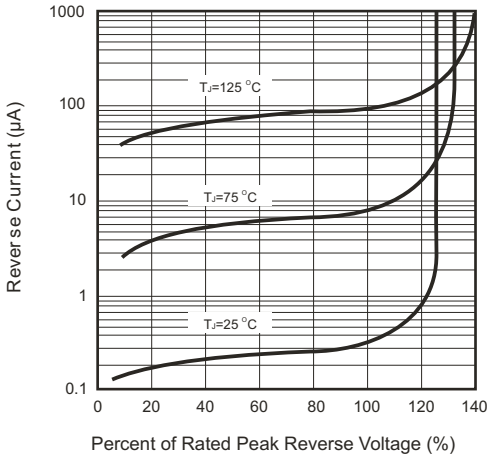


Fig.2 Forward Characteristics

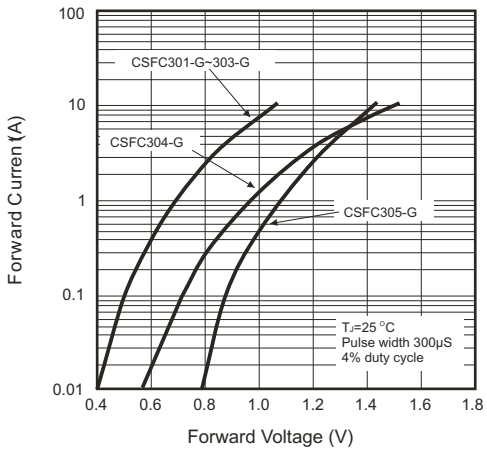


Fig.3 Junction Capacitance

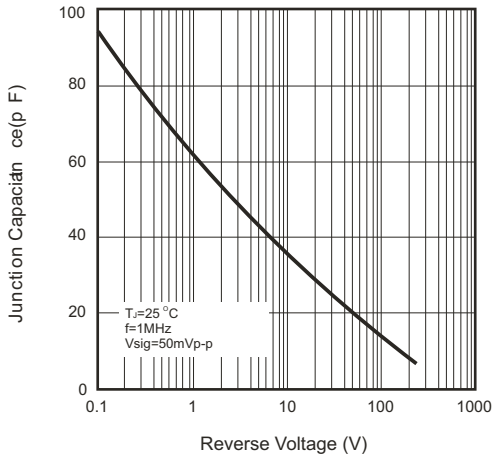


Fig.4 Non-repetitive Forward Surge Current

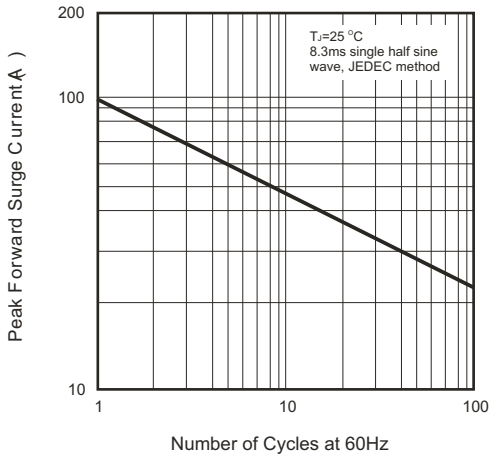
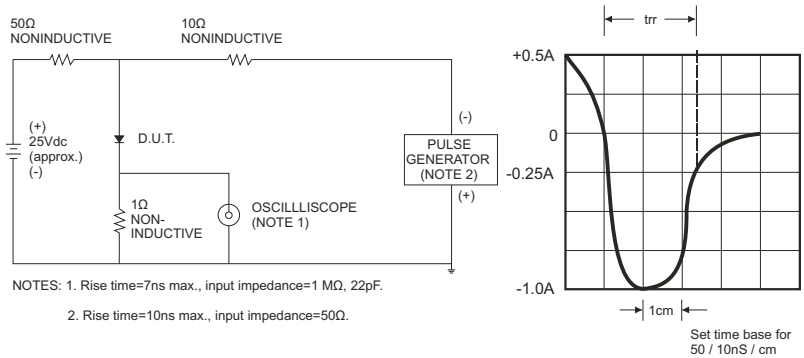


Fig.5 Test Circuit Diagram and Reverse Recovery Time Characteristics



NOTES: 1. Rise time=7ns max., input impedance=1 MΩ, 22pF.

2. Rise time=10ns max., input impedance=50Ω.

Fig.6 Current Derating Curve