Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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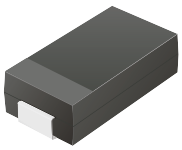
CFRC301-G Thru. CFRC307-G

Reverse Voltage: 50 to 1000 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.

-Fast recovery time: 150~500nS.

-Low leakage current.

Mechanical data

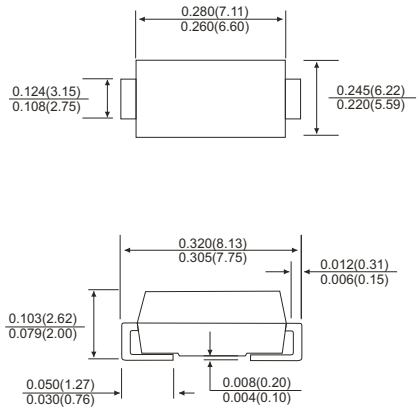
-Case: JEDEC DO-214AB, molded plastic.

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

-Polarity: Color band denotes cathode end.

-Approx. weight: 0.21 grams

DO-214AB (SMC)



Dimensions in inches and (millimeter)

Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CFRC 301-G	CFRC 302-G	CFRC 303-G	CFRC 304-G	CFRC 305-G	CFRC 306-G	CFRC 307-G	Units
Max. repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Max. DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Max. RMS voltage	V_{RMS}	35	70	140	280	420	560	700	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	1.3							V
Reverse recovery time	T_{rr}	150				250	500		nS
Max. DC reverse current at T_A=25 °C rated DC blocking voltage T_A=125 °C	I_R	5.0 250							μA
Max. thermal resistance (Note 1)	$R_{\theta JA}$	50							°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 square land area.

RATING AND CHARACTERISTIC CURVES (CFRC301-G thru CFRC307-G)

Fig.1 Reverse Characteristics

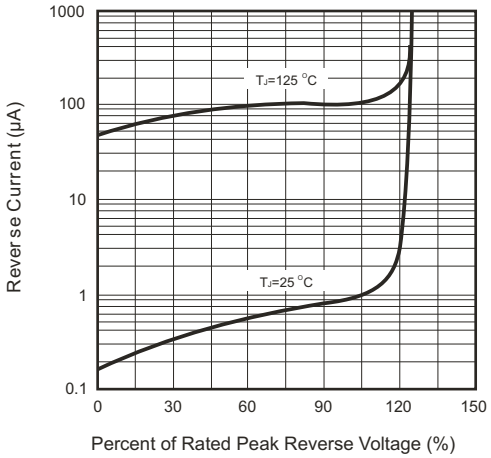


Fig.2 Forward Characteristics

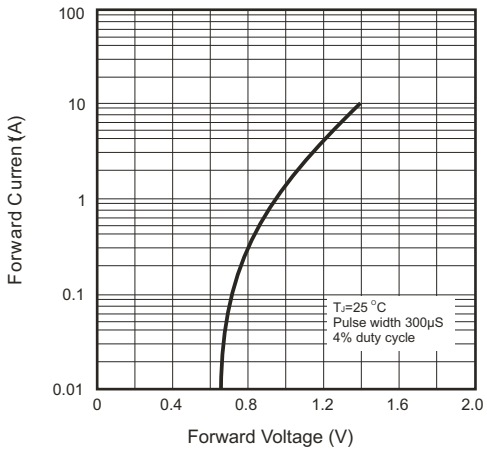


Fig.3 Junction Capacitance

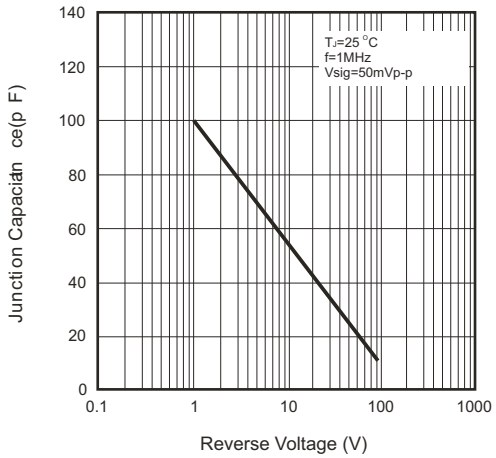


Fig.4 Non-repetitive Forward Surge Current

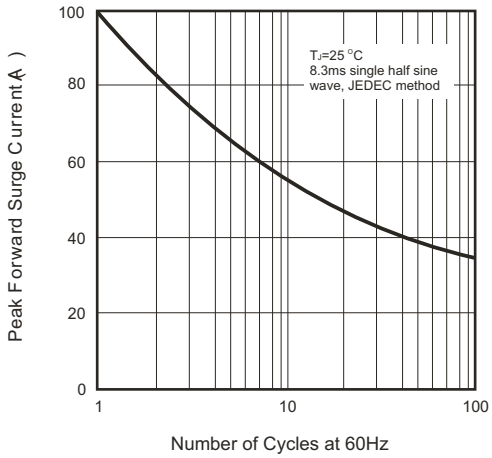
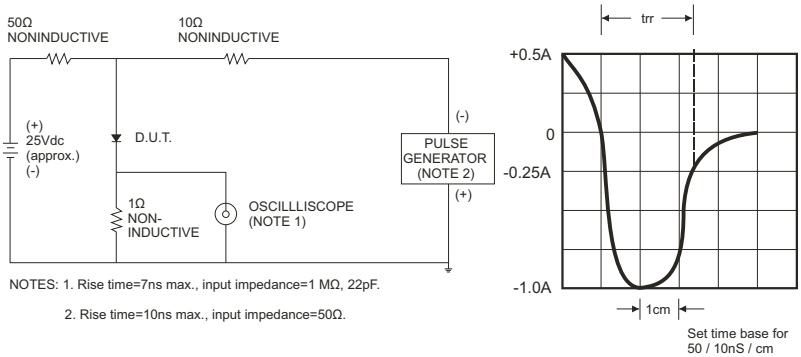


Fig.5 Test Circuit Diagram and Reverse Recovery Time Characteristics



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

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

Fig.6 Current Derating Curve