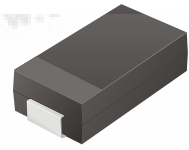


# CSFC301-G Thru. CSFC305-G

Reverse Voltage: 50 to 600 Volts

Forward Current: 3.0 Amp

RoHS Device

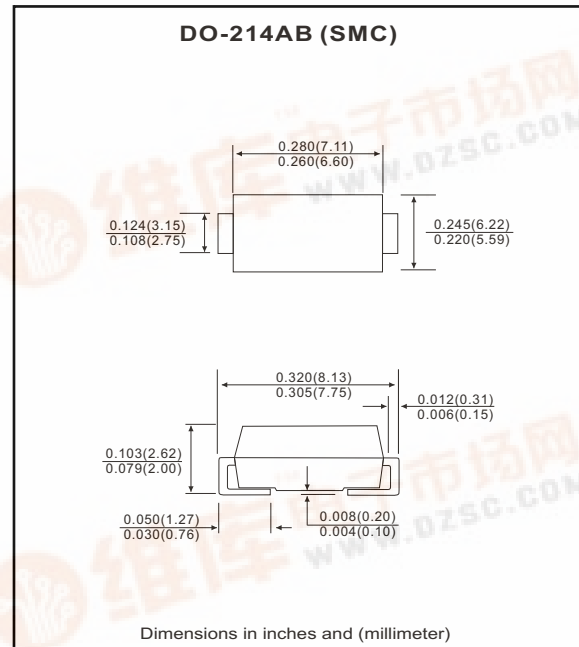


## Features

- 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



## 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 $T_A=25^{\circ}C$<br>rated DC blocking voltage $T_A=100^{\circ}C$     | $I_R$           | 5.0<br>250  |           |           |           |           | $\mu A$       |
| Max. thermal resistance (Note 1)                                                                 | $R_{\theta JL}$ | 16          |           |           |           |           | $^{\circ}C/W$ |
| Max. operating junction temperature                                                              | $T_J$           | 150         |           |           |           |           | $^{\circ}C$   |
| Storage temperature                                                                              | $T_{STG}$       | -55 to +150 |           |           |           |           | $^{\circ}C$   |

Notes: 1. Thermal resistance from junction to lead mounted on P.C.B. with 8.0×8.0 mm<sup>2</sup> copper pad area.

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

Fig.1 Reverse Characteristics

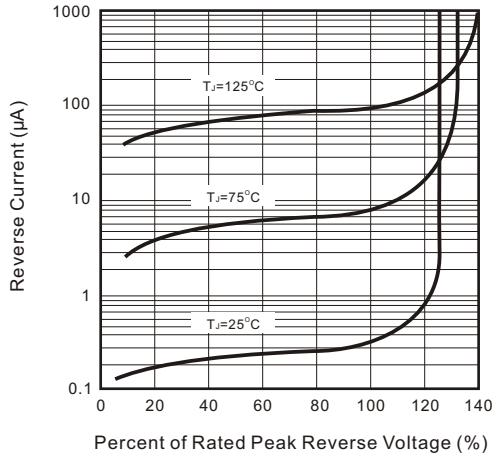


Fig.2 Forward Characteristics

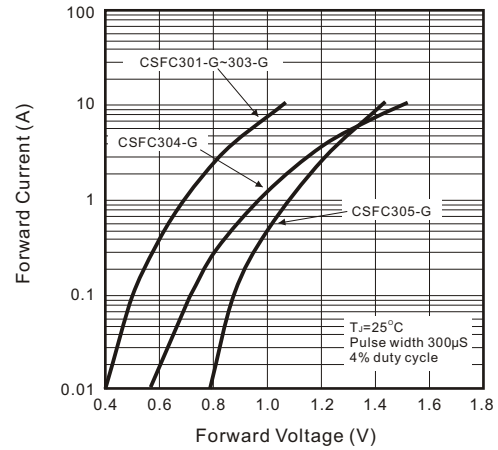


Fig.3 Junction Capacitance

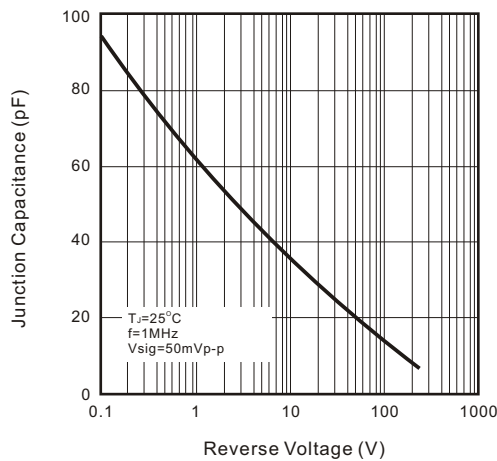


Fig.4 Non-repetitive Forward Surge Current

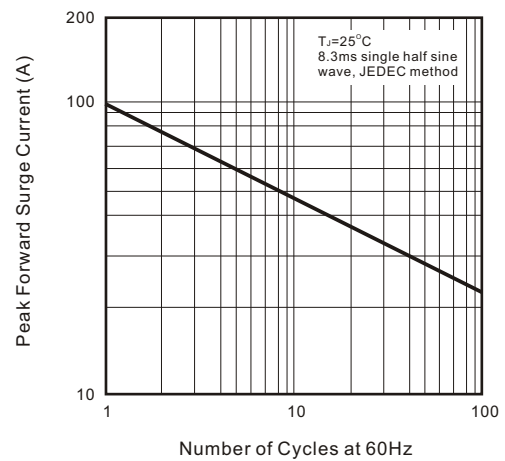


Fig.5 Test Circuit Diagram and Reverse Recovery Time Characteristics

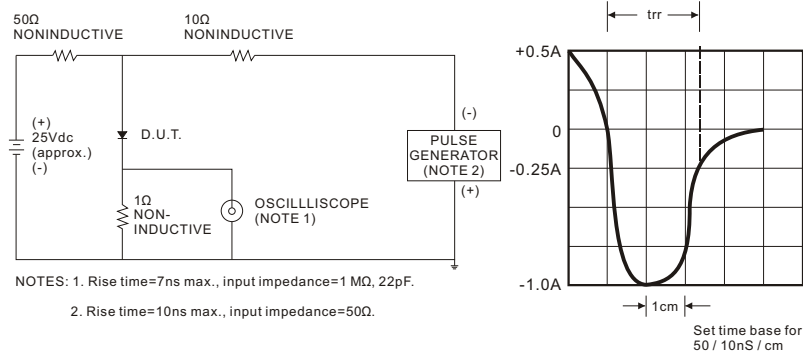


Fig.6 Current Derating Curve

