

# SMD Efficient Fast Recovery Rectifier

[查询"CEFM101-G"供应商](#)

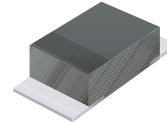
**COMCHIP**  
SMD DIODE SPECIALIST



## CEFM101-G Thru CEFM105-G (RoHS Device)

**Reverse Voltage: 50 ~ 600 Volts**

**Forward Current: 1.0 Amp**

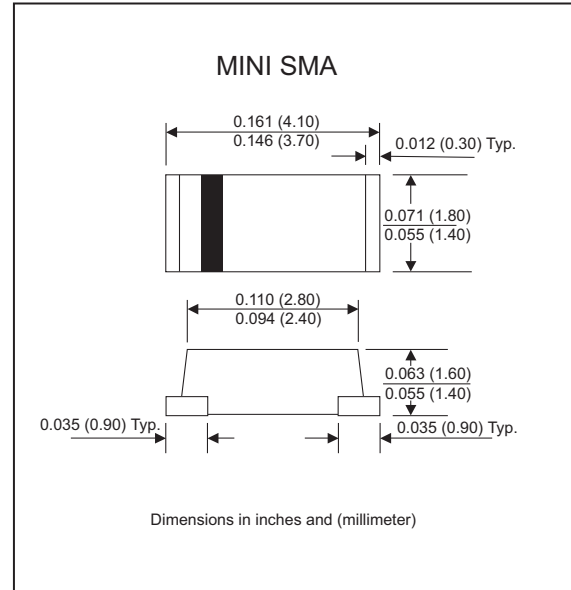


### Features:

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

### Mechanical Data:

- Case: Mini-SMA/SOD-123 molded plastic
- Terminals: solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Approx. Weight: 0.04 gram



### Maximum Ratings and Electrical Characteristics:

| Parameter                                                                                                | Symbol          | CEFM101-G   | CEFM102-G | CEFM103-G | CEFM104-G | CEFM105-G | Unit          |
|----------------------------------------------------------------------------------------------------------|-----------------|-------------|-----------|-----------|-----------|-----------|---------------|
| 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<br>8.3ms single half sine-wave<br>superimposed on rate load<br>(JEDEC method) | $I_{FSM}$       | 30          |           |           |           |           | A             |
| Max. Average Forward Current                                                                             | $I_o$           | 1.0         |           |           |           |           | A             |
| Max. Instantaneous Forward Voltage<br>at 1.0A                                                            | $V_F$           | 0.875       |           |           | 1.1       | 1.25      | V             |
| Reverse recovery time                                                                                    | $T_{rr}$        | 25          |           |           | 35        | 50        | nS            |
| Max. DC Reverse Current at Rated DC<br>Blocking Voltage<br>$T_a=25^{\circ}C$<br>$T_a=100^{\circ}C$       | $I_R$           | 5.0<br>250  |           |           |           |           | uA            |
| Max. Thermal Resistance (Note1)                                                                          | $R_{\theta JL}$ | 42          |           |           |           |           | $^{\circ}C/W$ |
| Max. Operating Junction Temperature                                                                      | $T_j$           | -55 to +155 |           |           |           |           | $^{\circ}C$   |
| Storage Temperature                                                                                      | $T_{STG}$       | -55 to +150 |           |           |           |           | $^{\circ}C$   |

Note1: Thermal resistance from junction to lead P.C.B. Mounted on 8.0x8.0 mm copper pad areas.

“-G” suffix designates RoHS compliant Version



## Rating and Characteristic Curves (CEFM101-G thru CEFM105-G)

Fig. 1 - Reverse Characteristics

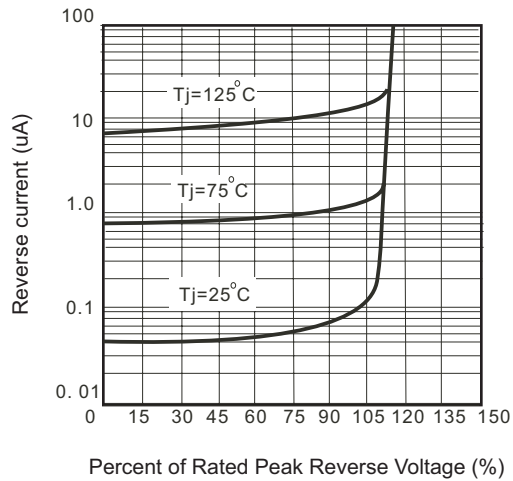


Fig.2 - Forward Characteristics

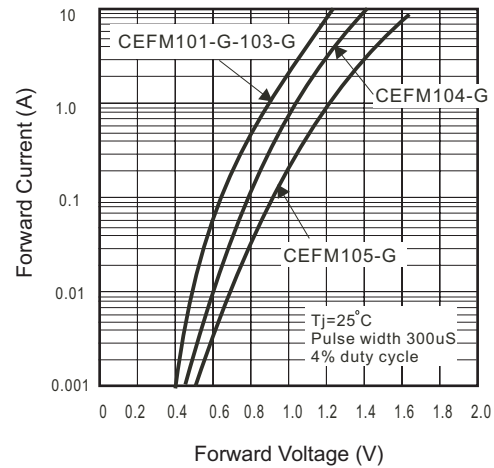


Fig. 3 - Junction Capacitance

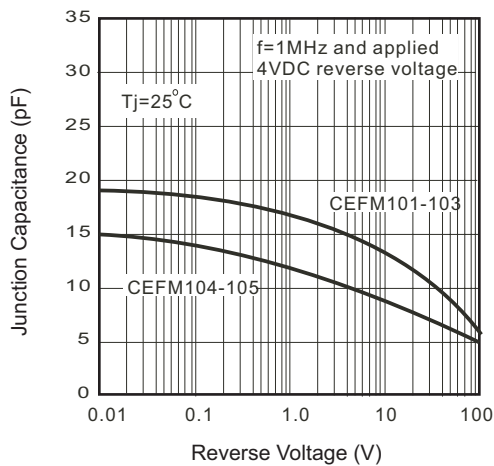


Fig.4 - Non Repetitive Forward Surge Current

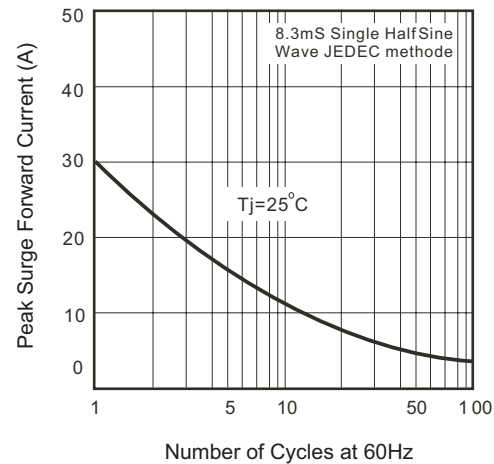
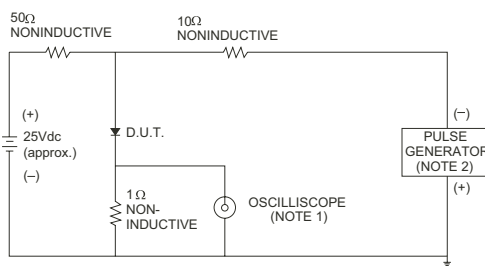


Fig. 5 - Test Circuit Diagram and Reverse Recovery Time Characteristics



NOTES: 1. Rise Time = 7ns max., Input Impedance = 1 megohm. 22pF.  
2. Rise Time = 10ns max., Source Impedance = 50 ohms.

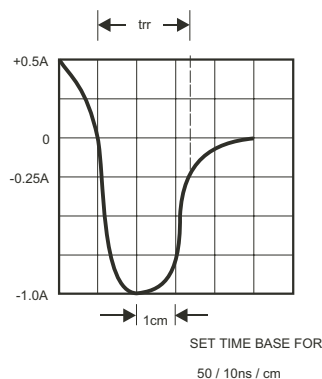


Fig. 6 - Current Derating Curve

