

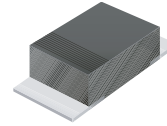
SMD Efficient Fast Recovery Rectifier



CEFM101-G Thru CEFM105-G (RoHS Device)

Reverse Voltage: 50 ~ 600 Volts

Forward Current: 1.0 Amp

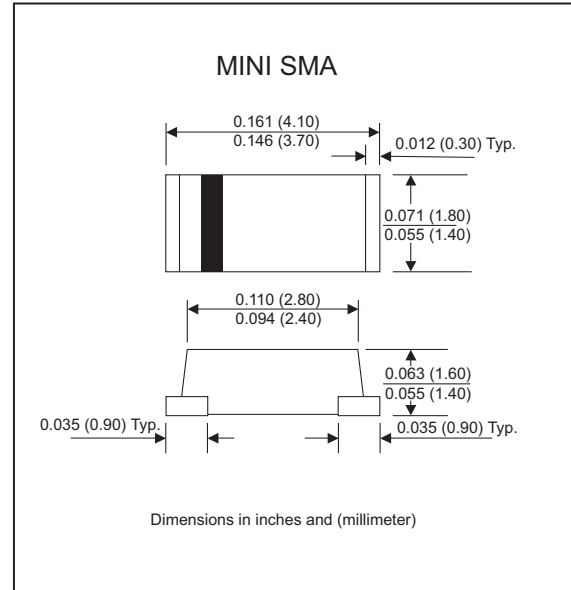


Features:

- 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 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	30					A
Max. Average Forward Current	I_o	1.0					A
Max. Instantaneous Forward Voltage 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 Blocking Voltage $T_a=25^{\circ}C$ $T_a=100^{\circ}C$	I_R	5.0 250					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.



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

Fig. 1 - Reverse Characteristics

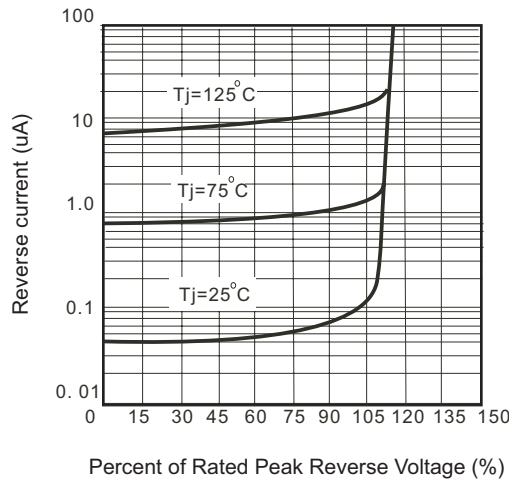


Fig.2 - Forward Characteristics

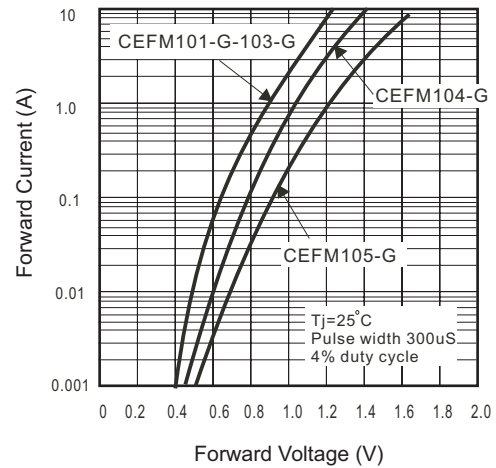


Fig. 3 - Junction Capacitance

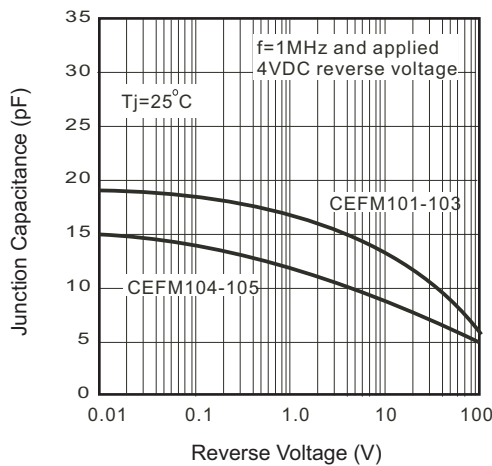


Fig.4 - Non Repetitive Forward Surge Current

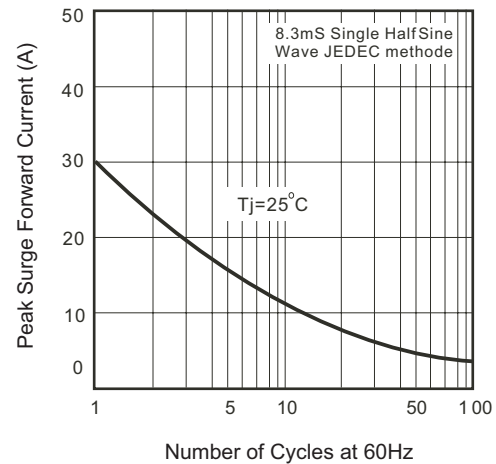
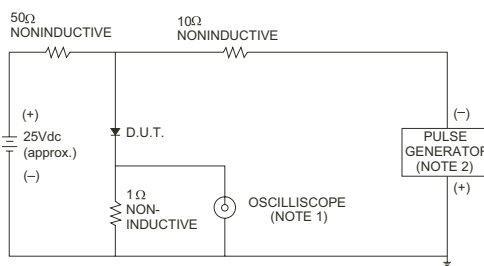


Fig. 5 - Test Circuit Diagram and Reverse Recovery Time Characteristics



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

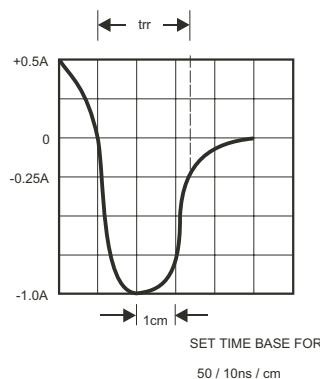


Fig. 6 - Current Derating Curve

