SMD Efficient Fast Recovery Rectifier

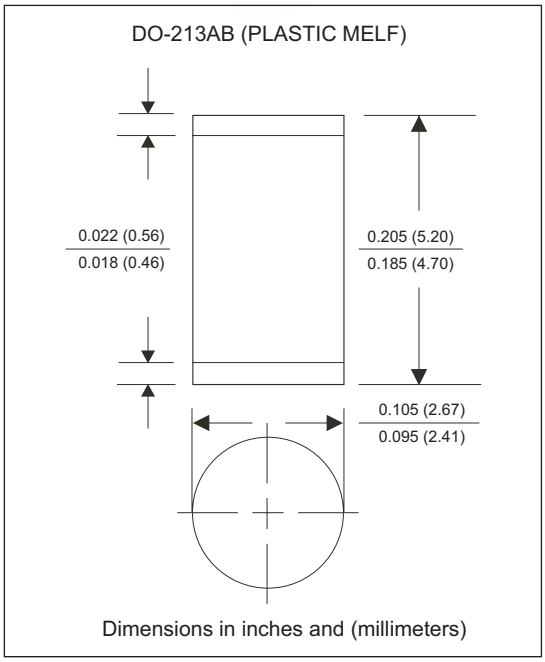
COMCHIP
SMD DIODE SPECIALIST

CEFL101-G Thru CEFL105-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
- High surge current capability



Mechanical Data:

- Case: JEDEC DO-213AB molded plastic
- Terminals: solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Approx. Weight: 0.116 gram

Maximum Ratings and Electrical Characterics:

Parameter	Symbol	CEFL101-G	CEFL102-G	CEFL103-G	CEFL104-G	CEFL105-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 Ta=25°C Ta=100°C	I_R	5.0 250					uA
Max. Thermal Resistance (Note1)	$R_{\theta JL}$	50					°C/W
Max. Operating Junction Temperature	T_j	-55 to +155					°C
Storage Temperature	T_{STG}	-55 to +125					°C

Note1: Thermal resistance from junction to lead 8.0mm square (0.13mm thick) land areas.

"**-G**" suffix designates RoHS compliant Version

Rating and Characteristic Curves (CEFL101-G thru CEFL105-G)

Fig. 1 - Reverse characteristics

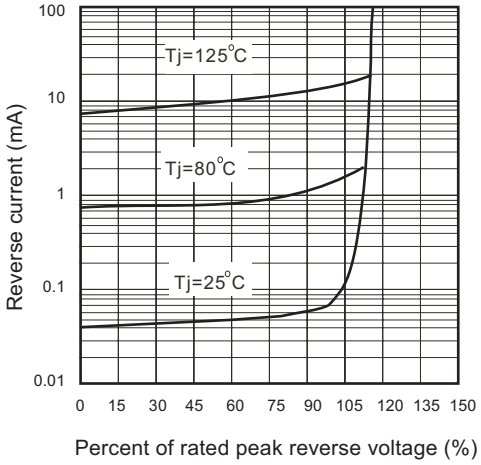


Fig.2 - Forward characteristics

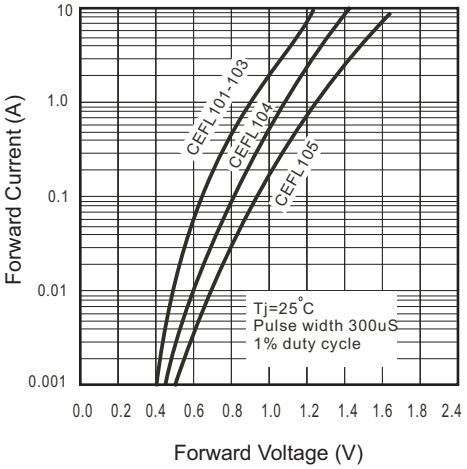


Fig. 3 - Junction Capacitance

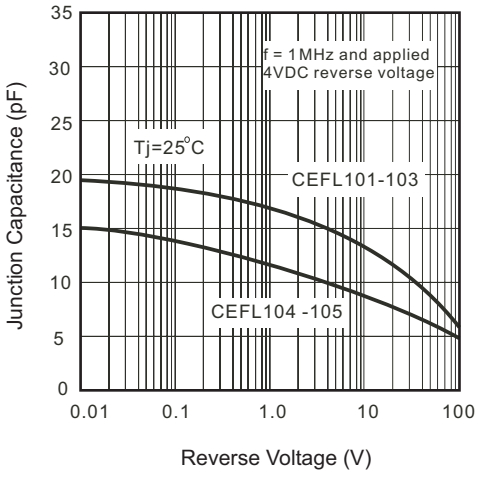


Fig.4 - Non Repetitive Forward Surge Curre

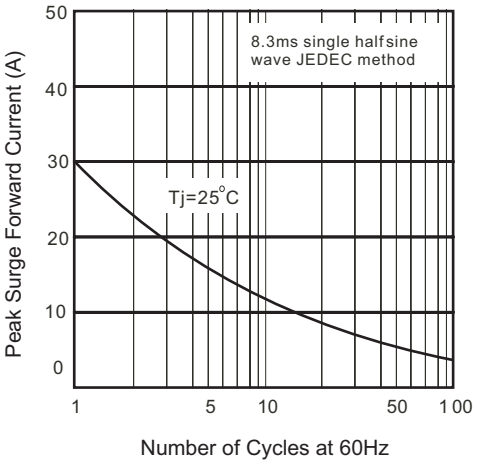
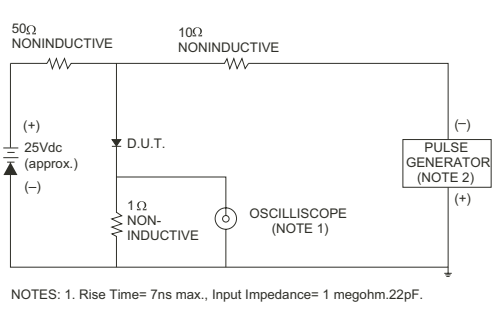


Fig. 5 - Test circuit diagram and Reverse recovery time characteristics



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.

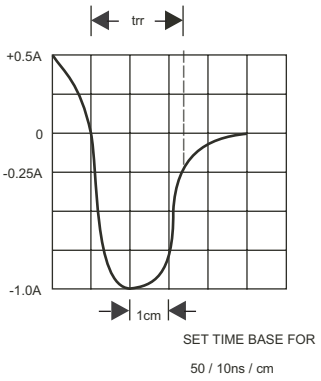
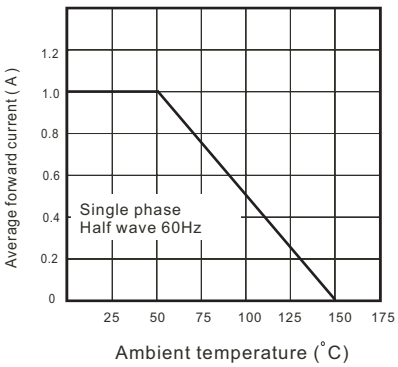


Fig. 6 - Current derating curve



"**-G**" suffix designates RoHS compliant Version