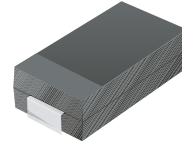


# SMD Efficient Fast Recovery Rectifier

## CEFA101-G Thru CEFA105-G (RoHS Device)

**Reverse Voltage: 50 ~ 600 Volts**

**Forward Current: 1.0 Amp**

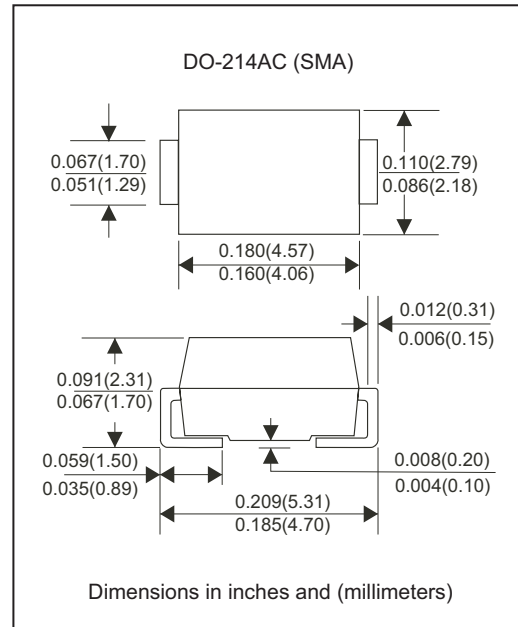


### Features:

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. flammability classification 94V-0.
- Super fast recovery time for high efficient
- 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: 0.063 gram



### Maximum Ratings and Electrical Characteristics:

Parameter	Symbol	CEFA101-G	CEFA102-G	CEFA103-G	CEFA104-G	CEFA105-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	$V_F$	0.92		1.25		1.3	V
Reverse recovery time	$T_{rr}$	25			35	50	nS
Max. DC Reverse Current at Rated DC Blocking Voltage $T_a=25^{\circ}C$ $T_a=100^{\circ}C$	$I_R$	5.0 200					$\mu A$
Max. Thermal Resistance (Note1)	$R_{\theta JL}$	25					$^{\circ}C/W$
Max. Operating Junction Temperature	$T_j$	150					$^{\circ}C$
Storage Temperature	$T_{STG}$	-55 to +150					$^{\circ}C$

Note1: Thermal resistance from junction to lead mounted on PCB with 8.0mmx8.0mm<sup>2</sup> copper pad areas.

## Rating and Characteristic Curves (CEFA101-G Thru CEFA105-G)

Fig. 1 - Reverse Characteristics

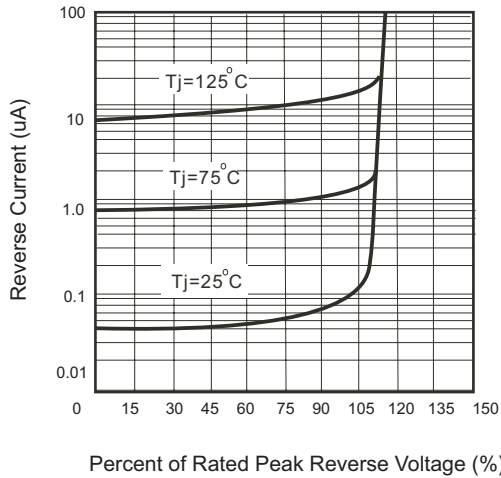


Fig.2 - Forward Characteristics

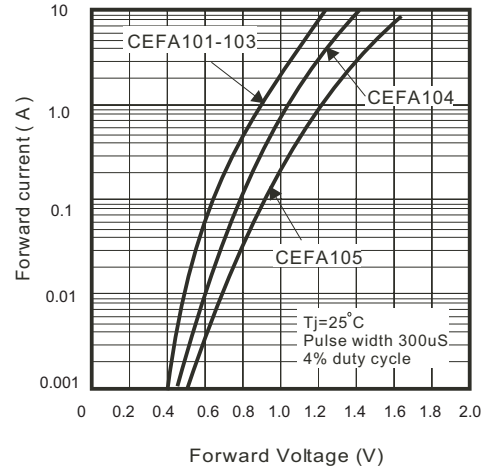


Fig. 3 - Junction Capacitance

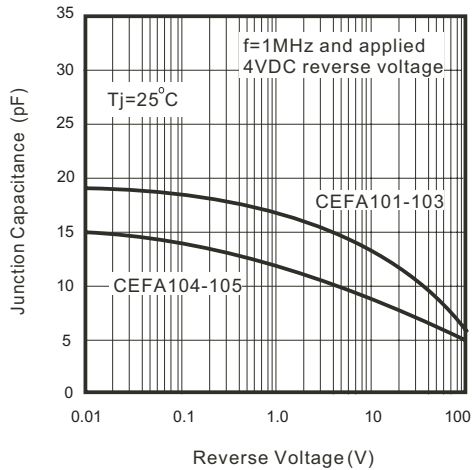


Fig. 4 - Non Repetitive Forward Surge Current

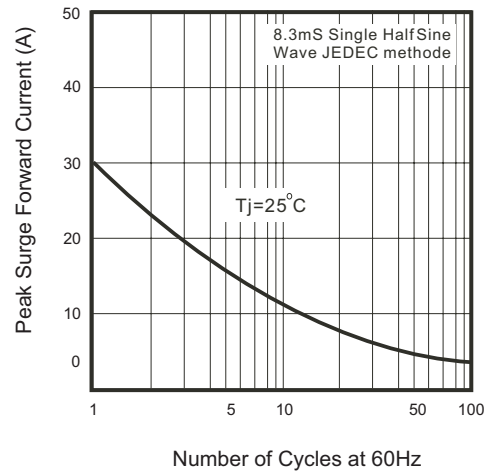
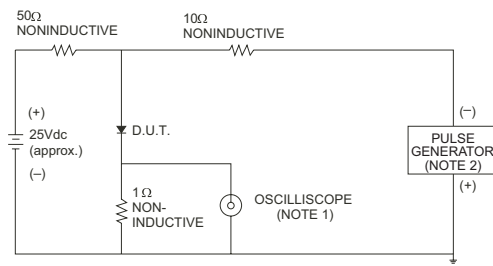
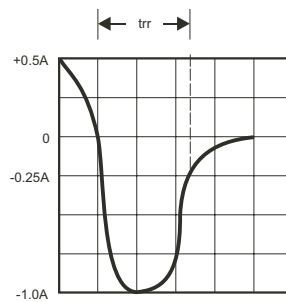


Fig 5 - Test Circuit Diagram and Reverse Recovery Time Characteristics



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



Set Time Base For  
50 / 10ns / cm

Fig. 6 - Current Derating Curve

