

## CURN101-HF Thru CURN105-HF

Forward current: 1.0A

Reverse voltage: 200 to 1000V

RoHS Device

Halogen Free

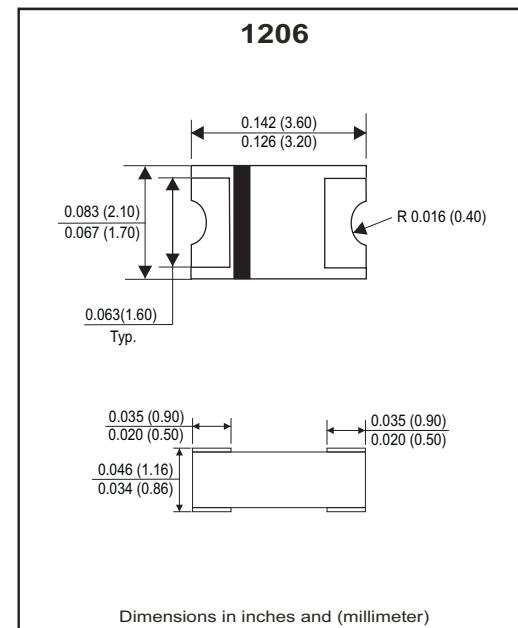


### Features

- GPRC(Glass passivated rectifier chip) inside.
- Glass passivated cavity-free junction.
- Low power loss, High efficiency.
- High current capability
- Plastic package has underwriters laboratory flammability classification 94V-0.
- Comply with AEC-Q101

### Mechanical Data

- Case: Packed with FRP substrate and epoxy underfilled.
- Terminals: Pure Tin plated (Lead-Free), solderable per MIL-STD-750, method 2026.
- Polarity: Laser cathode band marking.
- Weight: 0.012 gram (approx).



### Circuit diagram



### Absolute Maximum Ratings (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	CURN 101-HF	CURN 102-HF	CURN 103-HF	CURN 104-HF	CURN 105-HF	Units
		Marking	57 .ZD.	57 .ZG.	57 .ZV.	57 .ZK.	57 .ZM.	
Repetitive peak reverse voltage		V <sub>RRM</sub>	200	400	600	800	1000	V
Average forward current		I <sub>F(AV)</sub>			1.0			A
Peak forward surge current	8.3ms single half sine-wave	I <sub>FSM</sub>		30		25		A
Reverse recovery time	I <sub>F</sub> =0.5A,I <sub>R</sub> =1.0A,I <sub>rr</sub> =0.25A	T <sub>rr</sub>		50		75		A
Operating junction temperature		T <sub>J</sub>			-65 to +175			°C
Storage temperature		T <sub>STG</sub>			-65 to +175			°C

### Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	Unit
Forward voltage	I <sub>F</sub> =0.1A I <sub>F</sub> =0.5A I <sub>F</sub> =1.0A	V <sub>F</sub>	-	0.98 1.28 1.45	- - 1.70	V
Repetitive peak reverse current	V <sub>R</sub> =Max. V <sub>RRM</sub> , TA=25°C	I <sub>RRM</sub>	-	0.08	5	uA
Junction capacitance	V <sub>R</sub> =4V, f=1.0MHz	C <sub>J</sub>	-	10	-	pF
Thermal Resistance	Junction to ambient (Note)	R <sub>θJA</sub>	-	90	-	°C/W
	Junction to lead (Note)	R <sub>θJL</sub>	-	40	-	

Notes: 1. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2×0.2"(5.0×5.0mm) copper pad areas.

Company reserves the right to improve product design , functions and reliability without notice.

REV:

## RATING AND CHARACTERISTIC CURVES (CURN101-HF Thru. CURN105-HF)

Fig.1- Forward current derating curve

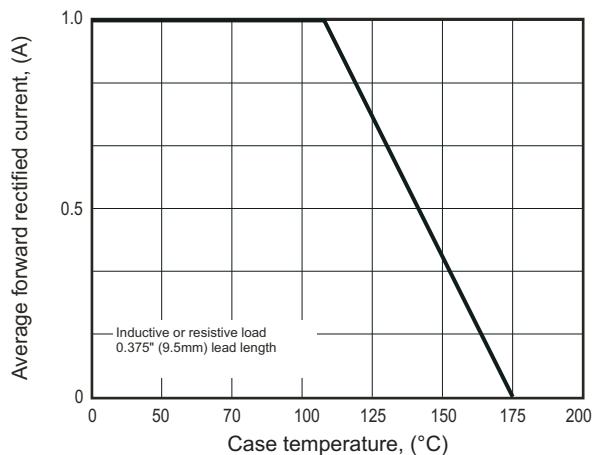


Fig.2- Maximum non-repetitive peak forward surge current

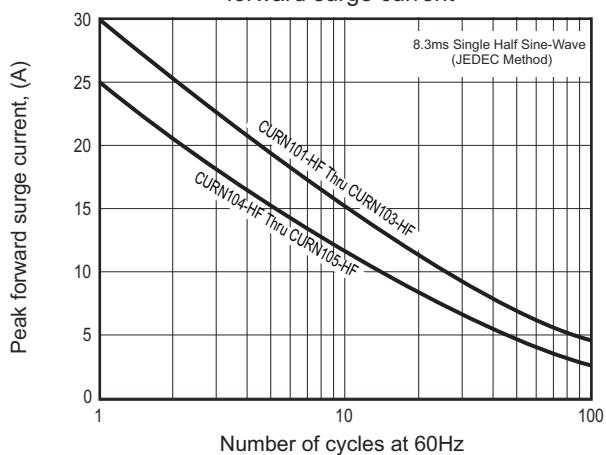


Fig.3- Typical instantaneous forward characteristics

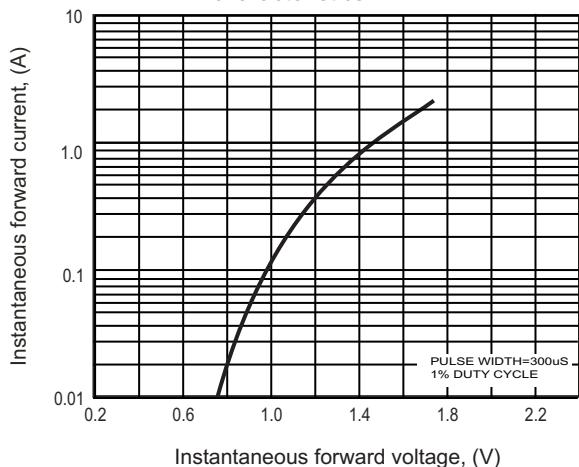


Fig.4- Typical reverse characteristics

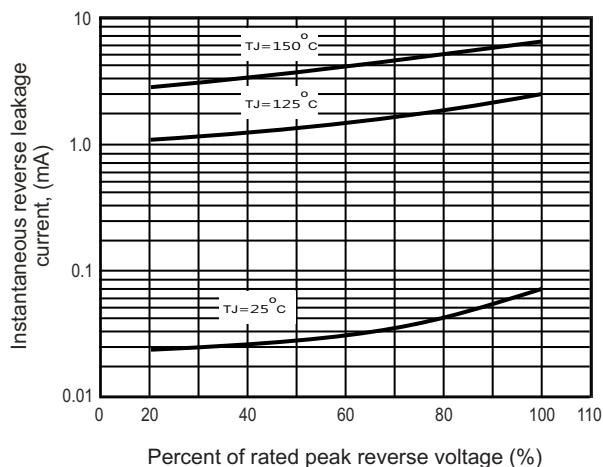


Fig.5 - Typical junction capacitance

