

CURN101-HF Thru CURN105-HF

Forward current: 1.0A

Reverse voltage: 200 to 1000V

RoHS Device

Halogen Free

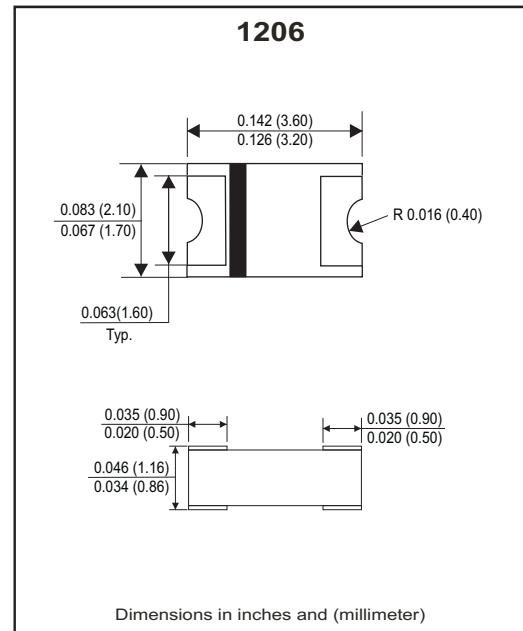


Features

- 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 _{RRM}	200	400	600	800	1000	V
Average forward current		I _{F(AV)}	1.0					A
Peak forward surge current	8.3ms single half sine-wave	I _{FSM}	30			25		A
Reverse recovery time	I _F =0.5A,I _R =1.0A,I _{rr} =0.25A	T _{rr}	50			75		A
Operating junction temperature		T _J	-65 to +175					°C
Storage temperature		T _{STG}	-65 to +175					°C

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

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	Unit
Forward voltage	$I_F=0.1A$	V_F	-	0.98	-	V
	$I_F=0.5A$		-	1.28	-	
	$I_F=1.0A$		-	1.45	1.70	
Repetitive peak reverse current	$V_R=Max. V_{RRM}, T_A=25^{\circ}C$	I_{RRM}	-	0.08	5	uA
Junction capacitance	$V_R=4V, f=1.0MHz$	C_J	-	10	-	pF
Thermal Resistance	Junction to ambient (Note)	$R_{\theta JA}$	-	90	-	°C/W
	Junction to lead (Note)	$R_{\theta JL}$	-	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

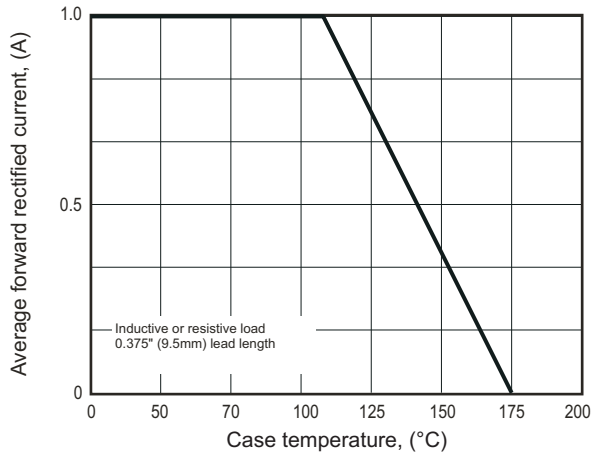


Fig.2- Maximum non-repetitive peak forward surge current

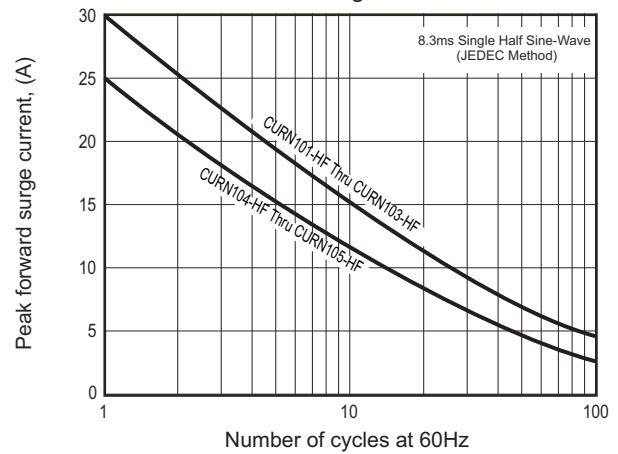


Fig.3- Typical instantaneous forward characteristics

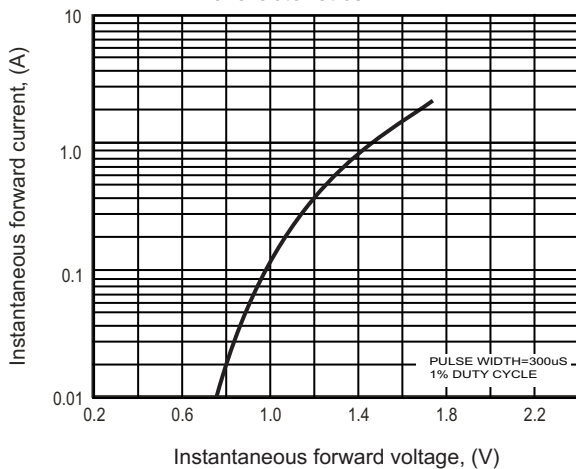


Fig.4- Typical reverse characteristics

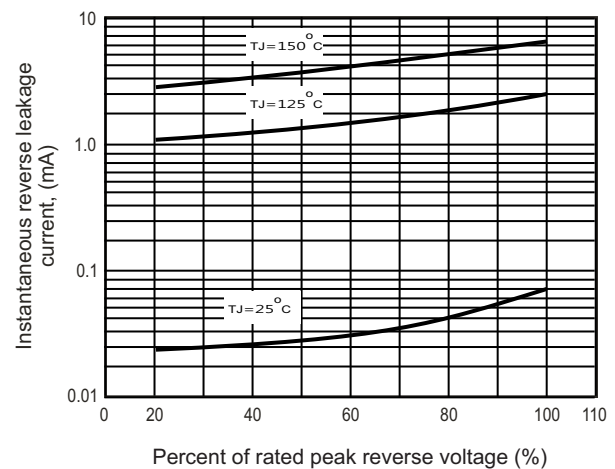


Fig.5 - Typical junction capacitance

