

FAST RECOVERY RECTIFIER

VOLTAGE RANGE: 1500 V
CURRENT: 5.0 A

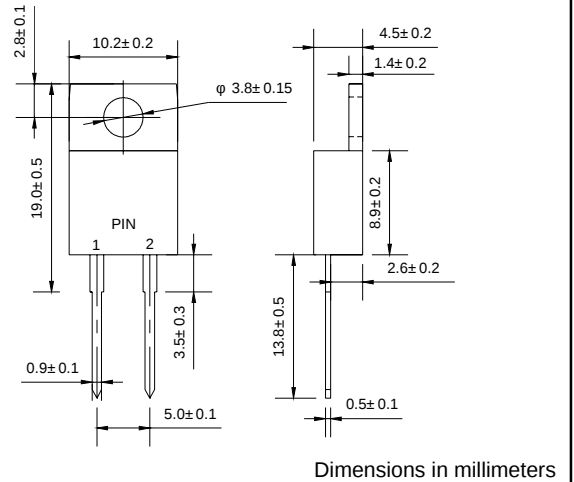
FEATURES

- ◇ Metal-Semiconductor junction with guard ring
- ◇ Epitaxial construction
- ◇ Low forward voltage drop, low switching losses
- ◇ High surge capability
- ◇ For use in low voltage, high frequency inverters free wheeling, and polarity protection applications
- ◇ The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

- ◇ Case: JEDEC TO-220AC
- ◇ Terminals: Solderable per MIL-STD-202, Method 208
- ◇ Polarity: As marked
- ◇ Weight: 0.064 ounces, 1.96 gram
- ◇ Mounting position: Any

TO-220AC



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 50 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		DD00515	UNITS
Maximum recurrent peak reverse voltage	V _{RRM}	1500	V
Maximum RMS voltage	V _{RMS}	1050	V
Maximum DC blocking voltage	V _{DC}	1500	V
Maximum average forward rectified current @T _C =100°C	I _{F(AV)}	5.0	A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load	I _{FSM}	75	A
Maximum instantaneous forward voltage (I _F =5.0A)	V _F	1.5	V
Maximum reverse current @T _J =25 °C at rated DC blocking voltage @T _J =125 °C	I _R	5.0 500	μ A
Maximum reverse recovery time (Note1)	t _{rr}	175	ns
Typical thermal resistance (Note2)	R _{θJC}	4.0	°C/W
Operating junction temperature range	T _J	- 55 ---- + 150	°C
Storage temperature range	T _{STG}	- 55 ---- + 150	°C

NOTE: 1. Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.
2. Thermal resistance junction to case.

www.galaxycn.com

FIG.1 – TYPICAL FORWARD CHARACTERISTIC

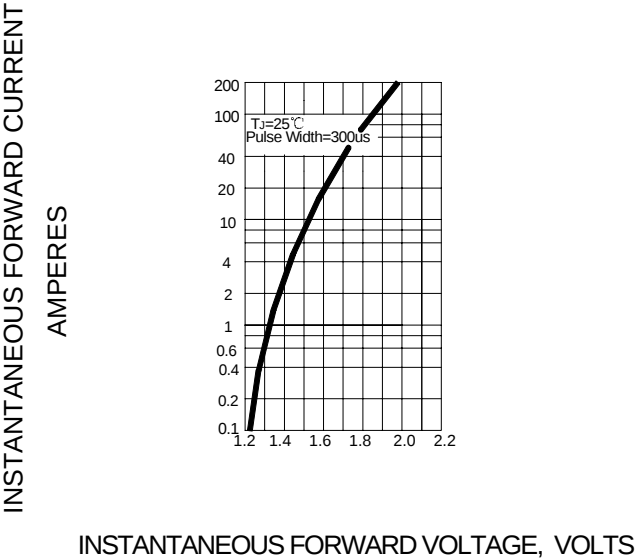


FIG.2- FORWARD DERATING CURVE

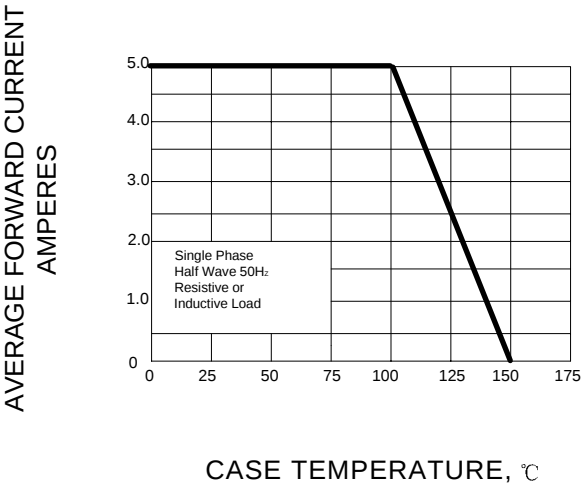


FIG.3- PEAK FORWARD SURGE CURRENT

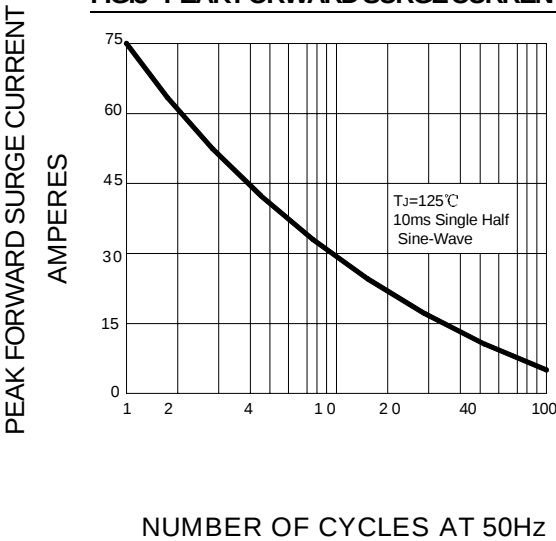


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

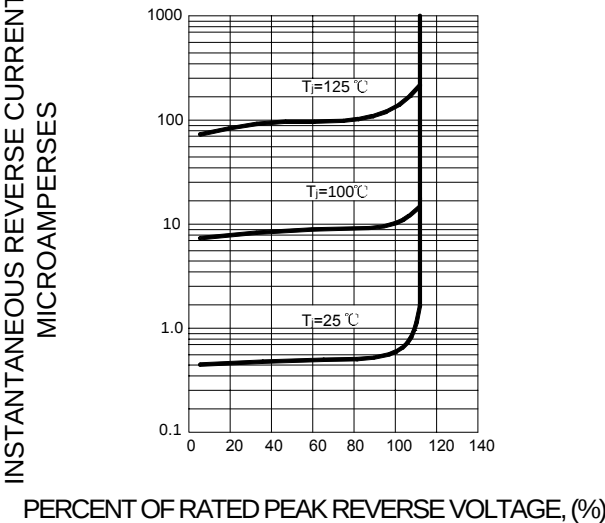


FIG.5 -- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

