

FAST RECOVERY RECTIFIERS

VOLTAGE RANGE: 200 --- 800 V
CURRENT: 5.0 A

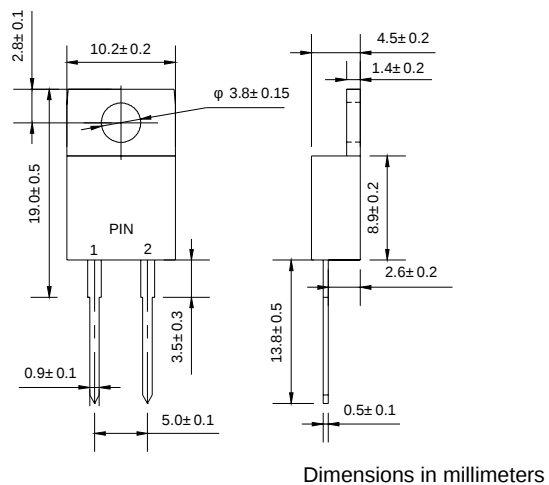
FEATURES

- ◇ Low cost
- ◇ Diffused junction
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with Freon Alcohol, Isopropanol and similar solvents

MECHANICAL DATA

- ◇ Case: JEDEC TO-220AC, molded plastic
- ◇ Terminals: Solderable per MIL-STD-202, Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.064 ounce, 1.96 grams

TO-220AC



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

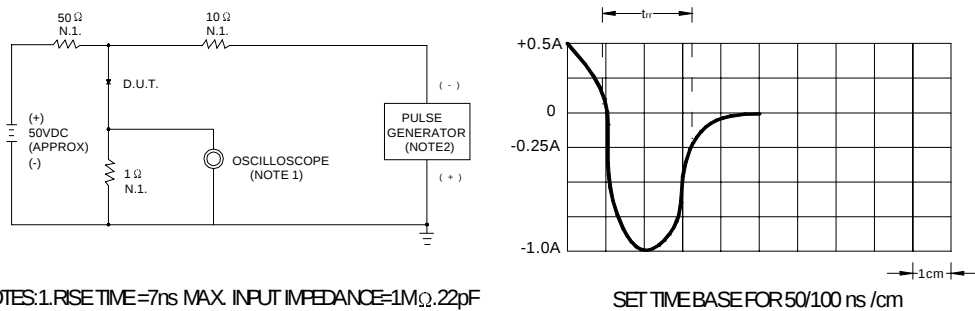
Single phase, half wave, 50Hz, resistive or inductive load. For capacitive load, derate by 20%.

		ERC 20-02	ERC 20-04	ERC 20-06	ERC 20-08	UNITS
Maximum recurrent peak reverse voltage	V _{RRM}	200	400	600	800	V
Maximum RMS voltage	V _{RMS}	140	280	420	560	V
Maximum DC blocking voltage	V _{DC}	200	400	600	800	V
Maximum average forw ard rectified current @T _c =125°C	I _{F(AV)}	5.0				A
Peak forw ard surge current 10ms single half-sine-w ave superimposed on rated load @T _j =125°C	I _{FSM}	70				A
Maximum instantaneous forw ard voltage @ 5.0 A	V _F	1.3		1.5		V
Maximum reverse current at rated DC blocking voltage	I _R	50				μA
Maximum reverse recovery time (Note1)	t _{rr}	400				ns
Typical thermal resistance (Note2)	R _{θJC}	3.0				°C/W
Operating junction temperature range	T _J	-55 ---- + 150				°C
Storage temperature range	T _{STG}	-55 ---- + 150				°C

NOTE: 1. Measured with $I_F=0.1\text{A}$, $I_R=0.1\text{A}$.

2. Thermal resistance from junction to case.

FIG.1 – REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES:1.RISE TIME=7ns MAX. INPUT IMPEDANCE=1MΩ, 22pF
2.RISE TIME=10ns MAX. SOURCE IMPEDANCE=50Ω

FIG.2 –FORWARD DERATING CURVE

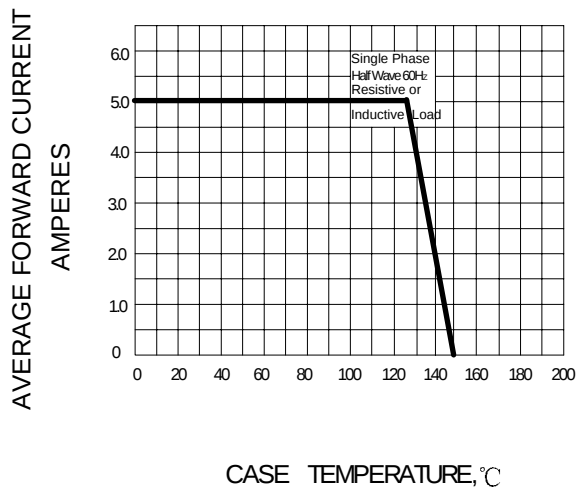


FIG.3 –PEAK FORWARD SURGE CURRENT

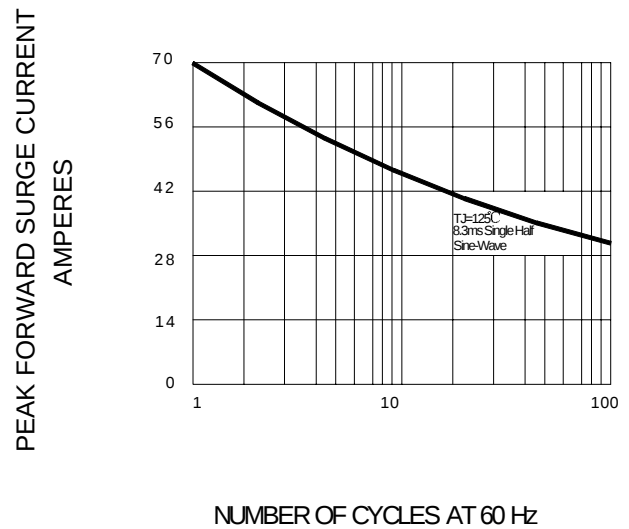


FIG.4-TYPICAL FORWARD CHARACTERISTIC

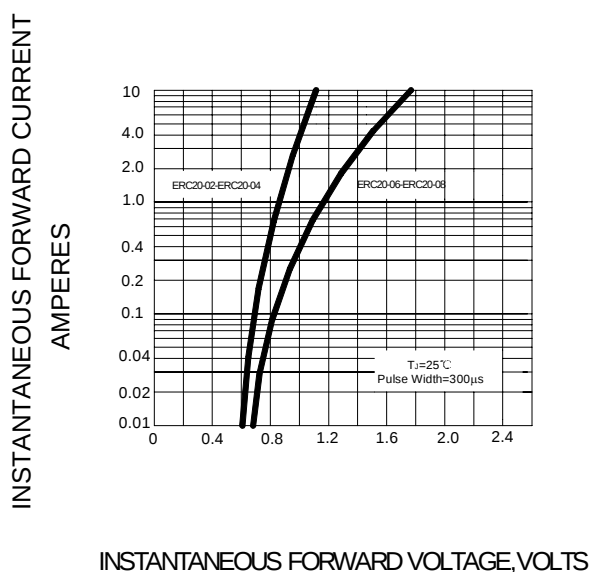


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

