

SUPER FAST RECTIFIERS

VOLTAGE RANGE: 50 --- 600 V
CURRENT: 5.0 A

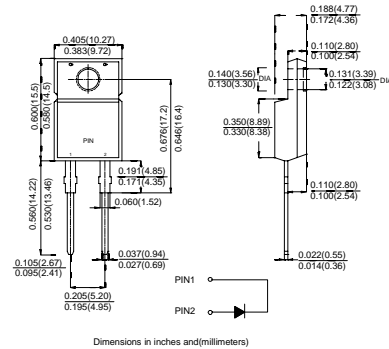
FEATURES

- ◇ Low cost
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with alcohol, Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

- ◇ Case: JEDEC ITO-220AC, molded plastic
- ◇ Terminals: Solderable per MIL- STD-750, Method 2026
- ◇ Polarity: As marked
- ◇ Weight: 0.064 ounces, 1.81 gram
- ◇ Mounting position: Any

ITO-220AC



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

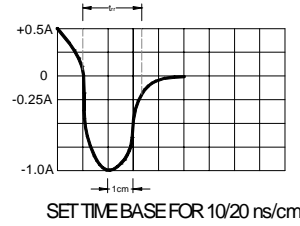
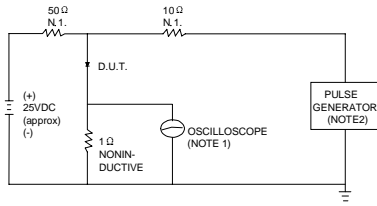
Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

| | | MUR 505F | MUR 510F | MUR 515F | MUR 520F | MUR 540F | MUR 560F | UNITS |
|---|-------------|------------------|----------|----------|----------|----------|----------|------------|
| Maximum recurrent peak reverse voltage | V_{RRM} | 50 | 100 | 150 | 200 | 400 | 600 | V |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 105 | 140 | 280 | 420 | V |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 150 | 200 | 400 | 600 | V |
| Maximum average forward rectified current @ $T_C=100^\circ C$ | $I_{F(AV)}$ | 5.0 | | | | | | A |
| Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ C$ | I_{FSM} | 60 | | | | | | A |
| Maximum instantaneous forward voltage @ 5.0A | V_F | 0.975 | | | | 1.3 | 1.5 | V |
| Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=150^\circ C$ | I_R | 5.0 | | | | 10.0 | | μA |
| | | 250 | | | | 500 | | |
| Maximum reverse recovery time (Note1) | t_{rr} | 25 | | | | 50 | | ns |
| Operating junction temperature range | T_J | - 55 ----- + 150 | | | | | | $^\circ C$ |
| Storage temperature range | T_{STG} | - 55 ----- + 150 | | | | | | $^\circ C$ |

NOTE: 1. Measured with $I_F=0.5A$, $I_R=1A$, $t_{rr}=0.25A$.

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



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

FIG.2 – TYPICAL FORWARD CHARACTERISTIC

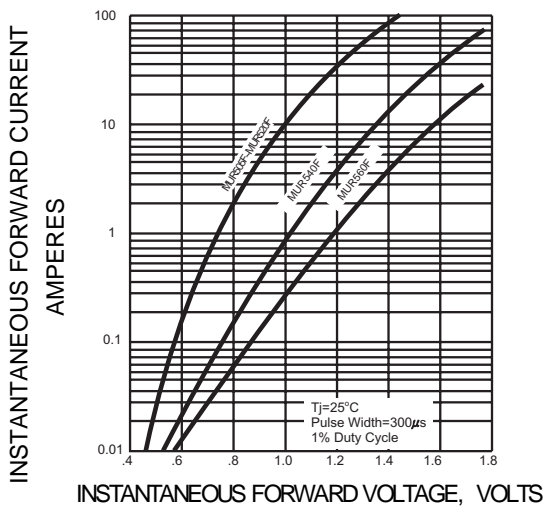


FIG.3 – PEAK FORWARD SURGE CURRENT

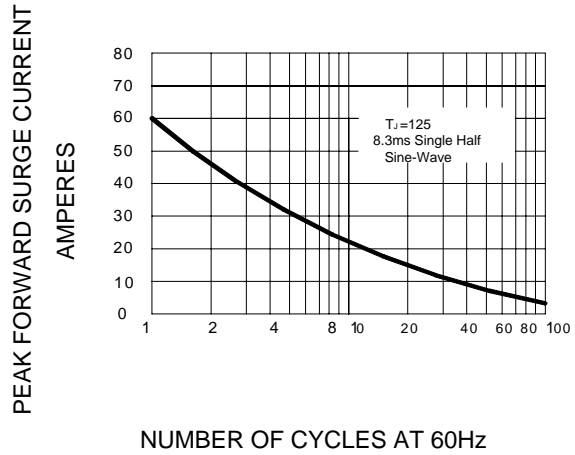


FIG.4-FORWARD DERATING CURVE

