

MUR1605FC-MUR1660FC

Ultra Fast Rectifiers

VOLTAGE RANGE: 50-600V

CURRENT: 16A



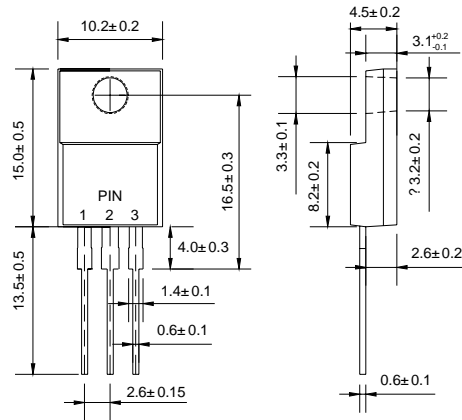
ITO-220AB

Features

- Low cost
- Diffused junction
- 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-220AB, molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.08ounce, 2.24 grams
- Mounting position: Any



Dimensions in millimeters

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 1605FC | MUR 1610FC | MUR 1615FC | MUR 1620FC | MUR 1640FC | MUR 1660FC | 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 @ $T_C=150$ | $I_{(AV)}$ | 8.0 16 | | | | | | A |
| Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load | I_{FSM} | 100 | | | | | | A |
| Maximum instantaneous forward voltage @ $8.0A, T_j=25$ @ $8.0A, T_j=150$ | V_F | 0.975 0.895 | | | | 1.30 1.00 | 1.50 1.20 | V |
| Maximum reverse current at rated DC blocking voltage @ $T_C=25$ @ $T_C=150$ | I_R | 5.0 250 | | | | 10 500 | | μA |
| Maximum reverse recovery time (Note2) | t_{rr} | 25 | | | | 50 | | ns |
| Typical thermal resistance junction to case | $R_{\theta JC}$ | 3.0 | | | | 2.0 | | /W |
| Operating junction temperature range | T_j | - 55 ---- + 175 | | | | | | |
| Storage temperature range | T_{STG} | - 55 ---- + 175 | | | | | | |

NOTE: 1. Pulse test: pulse width=300 μs , duty cycle 2.0%.
2. Measured with $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$.

Ratings AND Characteristic Curves

FIG.1 –TYPICAL FORWARD CHARACTERISTIC

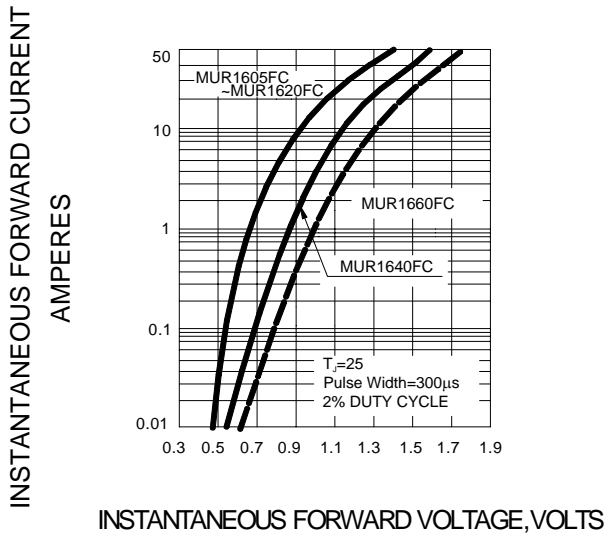


FIG.2 –TYPICAL REVERSE CHARACTERISTICS

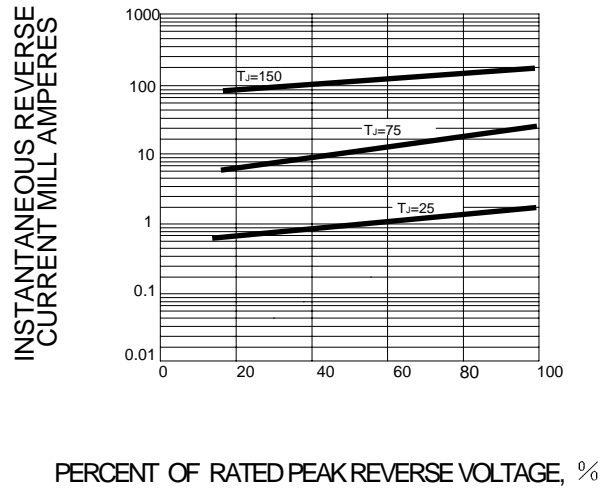


FIG.3 – PEAK FORWARD SURGE CURRENT

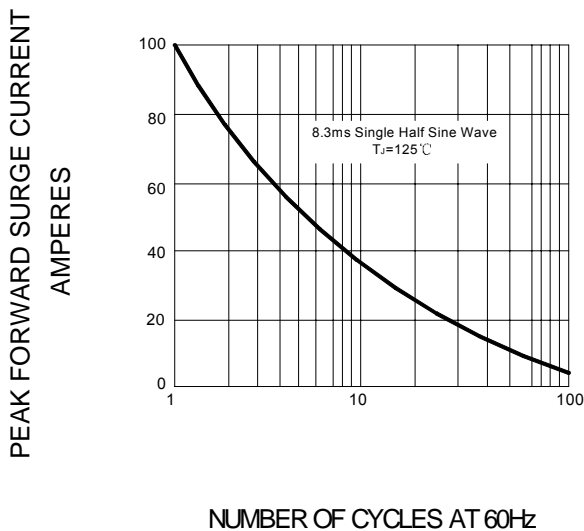


FIG.4 – FORWARD DERATING CURVE

