

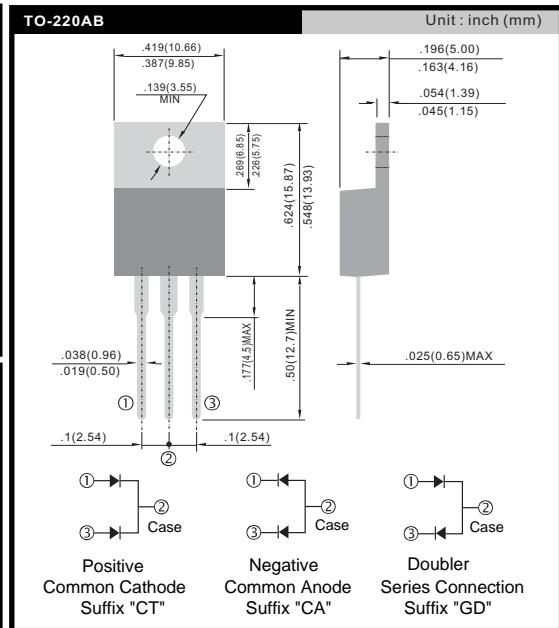
Pb Free Plating Product

MUR1605 thru MUR1660



16.0 Ampere Glass Passivated Junction Ultrafast Recovery Rectifiers

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| <p>Features</p> <ul style="list-style-type: none"> * Fast switching for high efficiency * Low forward voltage drop * High current capability * Low reverse leakage current * High surge current capability <p>Application</p> <ul style="list-style-type: none"> * Automotive Environment DC Motor Control * Plating Power Supply UPS * Amplifier and Sound Device System etc.. |
| <p>Mechanical Data</p> <ul style="list-style-type: none"> * Case: Molded plastic TO-220AB Heatsink * Epoxy: UL 94V-0 rate flame retardant * Terminals: Solderable per MIL-STD-202 method 208 * Polarity:As marked on diode body * Mounting position: Any * Weight: 2.03 grams |



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| | SYMBOL | MUR1605CT | MUR1610CT | MUR1620CT | MUR1630CT | MUR1640CT | MUR1660CT | UNIT |
|---|----------|--------------|-----------|-----------|-----------|-----------|-----------|------|
| | | MUR1605CA | MUR1610CA | MUR1620CA | MUR1630CA | MUR1640CA | MUR1660CA | |
| Common Cathode Suffix "CT" | | | | | | | | |
| Common Anode Suffix "CA" | | | | | | | | |
| Anode and Cathode Coexistence Suffix "GD" | | MUR1605GD | MUR1610GD | MUR1620GD | MUR1630GD | MUR1640GD | MUR1660GD | |
| Maximum Recurrent Peak Reverse Voltage | VRRM | 50 | 100 | 200 | 300 | 400 | 600 | V |
| Maximum RMS Voltage | VRMS | 35 | 70 | 140 | 210 | 280 | 420 | V |
| Maximum DC Blocking Voltage | VDC | 50 | 100 | 200 | 300 | 400 | 600 | V |
| Maximum Average Forward Rectified Current Tc=100°C | IF(AV) | 16.0 | | | | | | A |
| Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method) | IFSM | 175 | | | 150 | | | A |
| Maximum Instantaneous Forward Voltage @ 8.0 A | VF | 0.98 | | | 1.3 | | 1.7 | V |
| Maximum DC Reverse Current @Tj=25°C | IR | 10.0 | | | | | | uA |
| At Rated DC Blocking Voltage @Tj=125°C | | 250 | | | | | | uA |
| Maximum Reverse Recovery Time (Note 1) | Trr | 35 | | | | | | nS |
| Typical junction Capacitance (Note 2) | Cj | 90 | | | | | | pF |
| Typical Thermal Resistance (Note 3) | RθJC | 2.2 | | | | | | °CW |
| Operating Junction and Storage Temperature Range | Tj, TSTG | -55 to + 150 | | | | | | °C |

NOTES : (1) Reverse recovery test conditions IF= 0.5A, R= 1.0A, Irr = 0.25A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

(3) Thermal Resistance junction to case.

FIG.1 - FORWARD CURRENT DERATING CURVE

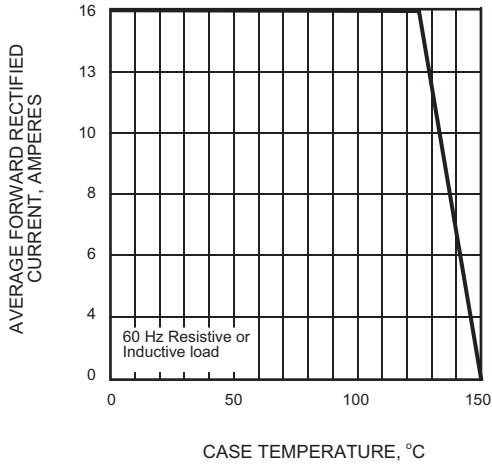


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

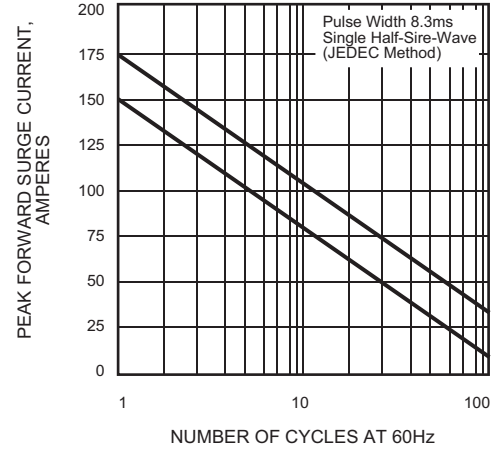


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

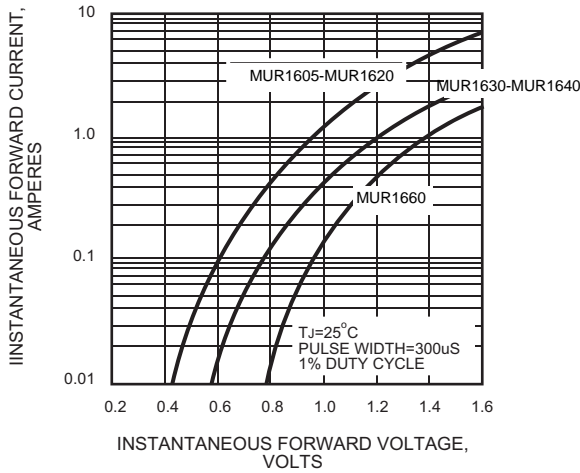


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

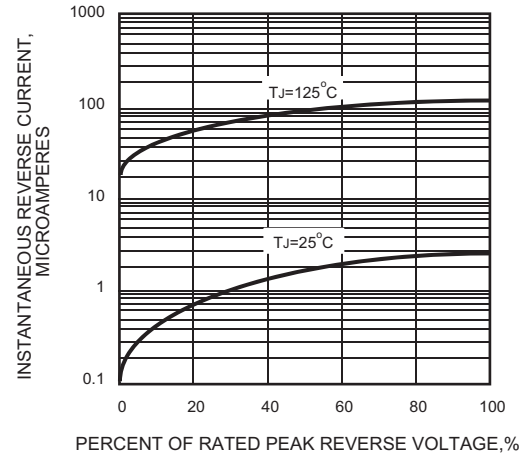


FIG.5 - TYPICAL JUNCTION CAPACITANCE

