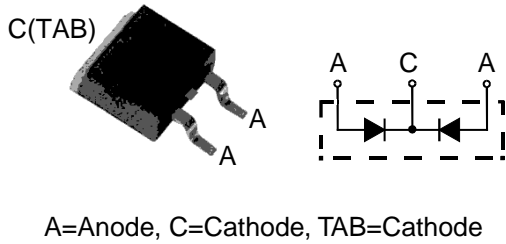
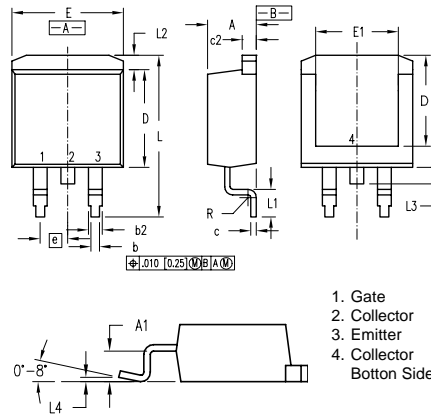


MURB1610CT thru MURB1620CT

Ultra Fast Recovery Diodes



Dimensions TO-263(D²PAK)



| Dim. | Millimeter | | Inches | |
|------|------------|-------|----------|------|
| | Min. | Max. | Min. | Max. |
| A | 4.06 | 4.83 | .160 | .190 |
| A1 | 2.03 | 2.79 | .080 | .110 |
| b | 0.51 | 0.99 | .020 | .039 |
| b2 | 1.14 | 1.40 | .045 | .055 |
| c | 0.46 | 0.74 | .018 | .029 |
| c2 | 1.14 | 1.40 | .045 | .055 |
| D | 8.64 | 9.65 | .340 | .380 |
| D1 | 8.00 | 8.89 | .315 | .350 |
| E | 9.65 | 10.29 | .380 | .405 |
| E1 | 6.22 | 8.13 | .245 | .320 |
| e | 2.54 BSC | | .100 BSC | |
| L | 14.61 | 15.88 | .575 | .625 |
| L1 | 2.29 | 2.79 | .090 | .110 |
| L2 | 1.02 | 1.40 | .040 | .055 |
| L3 | 1.27 | 1.78 | .050 | .070 |
| L4 | 0 | 0.20 | 0 | .008 |
| R | 0.46 | 0.74 | .018 | .029 |

| | V _{RRM} | V _{RMS} | V _{DC} |
|-------------------|------------------|------------------|-----------------|
| | V | V | V |
| MURB1610CT | 100 | 70 | 100 |
| MURB1620CT | 200 | 140 | 200 |

| Symbol | Characteristics | Maximum Ratings | Unit |
|-----------------------------------|--|----------------------------|------|
| I _(AV) | Maximum Average Forward Rectified Current @T _c =120°C | 16 | A |
| I _{FSM} | Non Repetitive Peak Forward Surge Current Per Diode Sinusoidal (JEDEC METHOD) T _P =10ms T _P =8.3ms | 80 90 | A |
| V _F | Maximum Forward Voltage Pulse Width=300us Duty Cycle I _F =8A @T _J =25°C I _F =8A @T _J =125°C I _F =16A @T _J =25°C I _F =16A @T _J =125°C | 1.1 1.0 1.25 1.20 | V |
| I _R | Maximum DC Reverse Current At Rated DC Blocking Voltage @T _J =25°C @T _J =100°C | 5 100 | uA |
| C _J | Typical Junction Capacitance Per Element (Note 1) | 80 | pF |
| T _{RR} | Maximum Reverse Recovery Time (Note 2) | 30 | ns |
| Re _{Jc} | Typical Thermal Resistance | 3.0 | °C/W |
| T _J , T _{stg} | Operating And Storage Temperature Range | -55 to +150 | °C |

NOTES: 1. Measured at 1.0MHz And Applied Reverse Voltage Of 4.0V DC.
2. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A.

FEATURES

- * Glass passivated chip
- * Superfast switching time for high efficiency
- * Low forward voltage drop and high current capability
- * Low reverse leakage current
- * High surge capacity

MECHANICAL DATA

- * Case: TO-263 molded plastic
- * Polarity: As marked on the body
- * Weight: 0.08 ounces, 2.24 grams
- * Mounting position: Any



MURB1610CT thru MURB1620CT

Ultra Fast Recovery Diodes

FIG.1 - FORWARD CURRENT DERATING CURVE

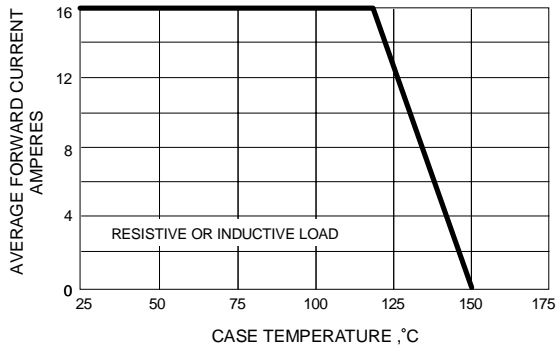


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

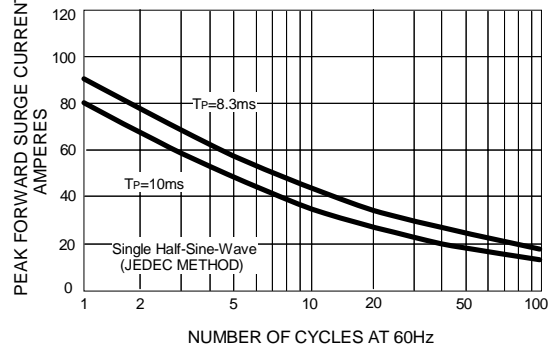


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

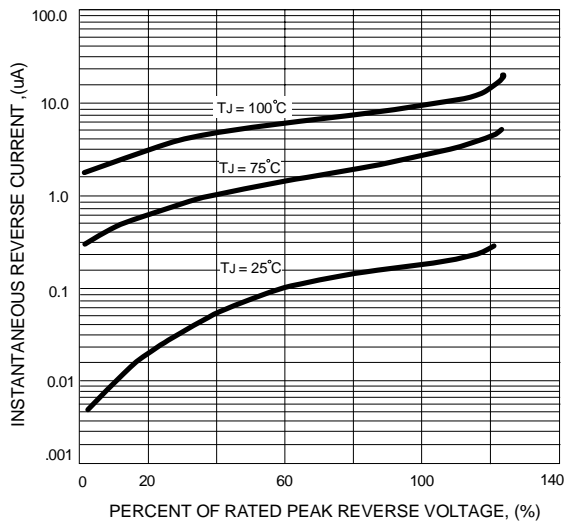


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

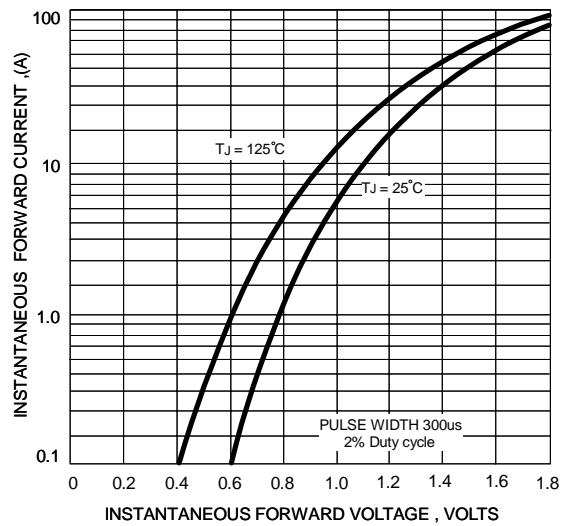


FIG.5 - TYPICAL JUNCTION CAPACITANCE

