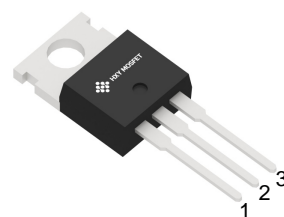


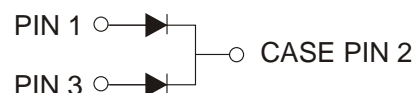


Features

- High frequency operation
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7 s, per JESD 22-B106



TO-220C(TO-220AB-3)



Maximum Ratings (Ta=25°C unless otherwise noted)

| Parameter | Symbol | Unit | Limit |
|--|-----------|----------------------|------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | V | 100 |
| Average Rectified Output Current @60Hz sine wave, R-load, $T_a=25^{\circ}\text{C}$ | I_O | A | 30 |
| Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, $T_a=25^{\circ}\text{C}$ | I_{FSM} | A | 250 |
| Current Squared Time @ $1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^{\circ}\text{C}$ | I^2t | A^2s | 176 |
| Storage Temperature | T_{stg} | $^{\circ}\text{C}$ | -55 ~ +175 |
| Junction Temperature | T_j | $^{\circ}\text{C}$ | -55 ~ +175 |

Electrical Characteristics(Ta=25°C unless otherwise specified)

| Parameter | Symbol | Unit | Test Conditions | Limit |
|---|------------|------|---|-------|
| Maximum instantaneous forward voltage drop per diode | V_{FM} | V | $I_{FM}=15.0\text{A}$ | 0.8 |
| Maximum DC reverse current at rated DC blocking voltage per diode | I_{RRM1} | mA | $V_{RM}=V_{RRM}$ $T_a=25^{\circ}\text{C}$ | 0.1 |
| | I_{RRM2} | | $V_{RM}=V_{RRM}$ $T_a=125^{\circ}\text{C}$ | 20 |



Typical Characteristics

FIG1: I_o - T_c Curve

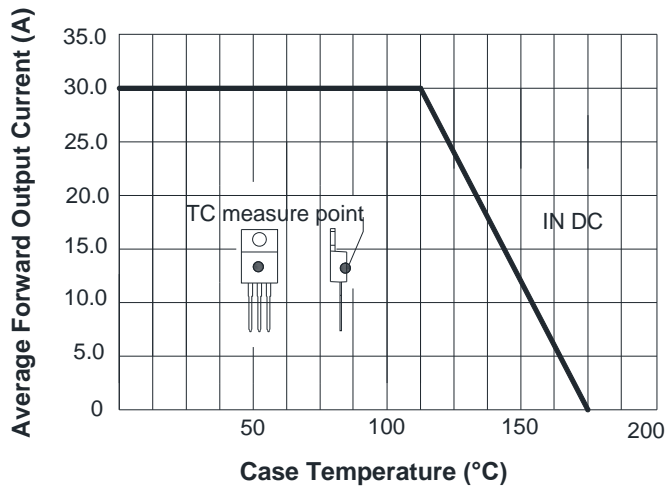


FIG2: Surge Forward Current Capability

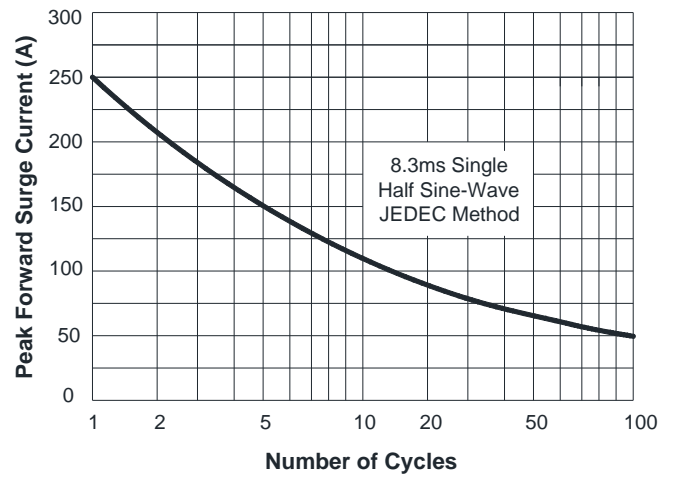


FIG3: Forward Voltage

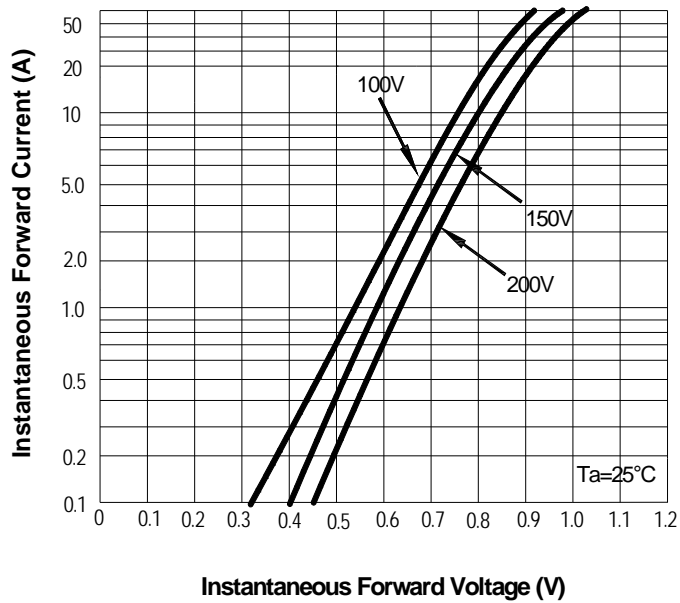
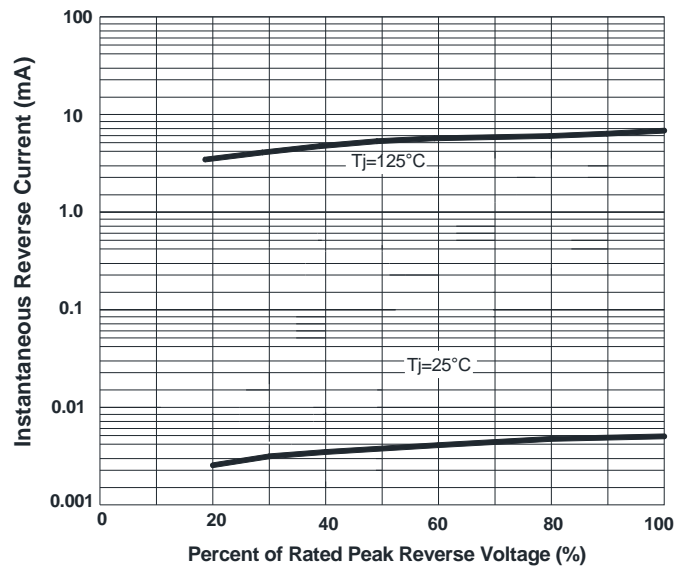
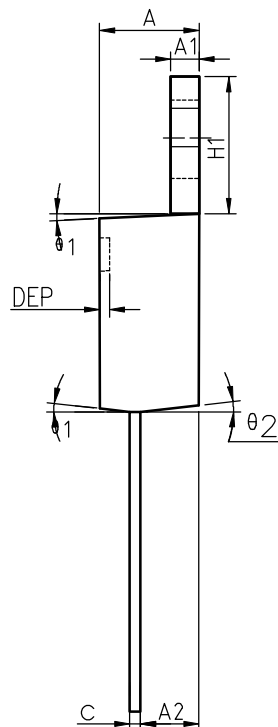
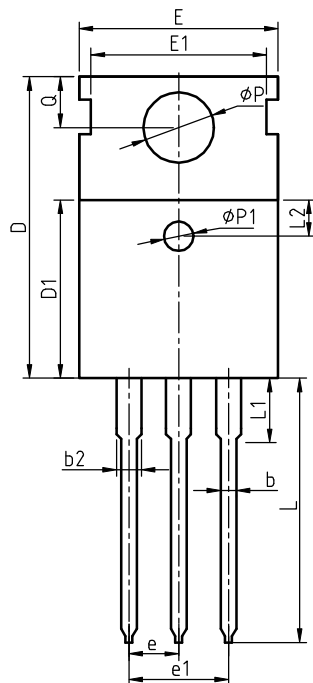


FIG.4: Instantaneous Reverse Characteristics



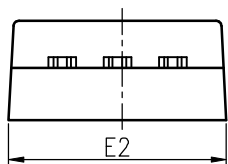


Package Information
TO-220C(TO-220AB-3)



COMMON DIMENSIONS

| SYMBOL | MIN | NOM | MAX | MIN | NOM | MAX |
|--------|-------|-------|-------|-------|-------|-------|
| A | 4.40 | 4.57 | 4.70 | 0.173 | 0.180 | 0.185 |
| A1 | 1.27 | 1.30 | 1.33 | 0.050 | 0.051 | 0.052 |
| A2 | 2.35 | 2.40 | 2.50 | 0.093 | 0.094 | 0.098 |
| b | 0.77 | 0.80 | 0.90 | 0.030 | 0.031 | 0.035 |
| b2 | 1.17 | 1.27 | 1.36 | 0.046 | 0.050 | 0.054 |
| c | 0.48 | 0.50 | 0.56 | 0.019 | 0.020 | 0.022 |
| D | 15.40 | 15.60 | 15.80 | 0.606 | 0.614 | 0.622 |
| D1 | 9.00 | 9.10 | 9.20 | 0.354 | 0.358 | 0.362 |
| DEP | 0.05 | 0.10 | 0.20 | 0.002 | 0.004 | 0.008 |
| E | 9.80 | 10.00 | 10.20 | 0.386 | 0.394 | 0.402 |
| E1 | - | 8.70 | - | - | 0.343 | - |
| E2 | 9.80 | 10.00 | 10.20 | 0.386 | 0.394 | 0.402 |
| e | | 2.54 | BSC | | 0.100 | BSC |
| e1 | | 5.08 | BSC | | 0.200 | BSC |
| H1 | 6.40 | 6.50 | 6.60 | 0.252 | 0.256 | 0.260 |
| L | 12.75 | 13.50 | 13.65 | 0.502 | 0.531 | 0.537 |
| L1 | - | 3.10 | 3.30 | - | 0.122 | 0.130 |
| L2 | | 2.50 | REF | | 0.098 | REF |
| P | 3.50 | 3.60 | 3.63 | 0.138 | 0.142 | 0.143 |
| P1 | 3.50 | 3.60 | 3.63 | 0.138 | 0.142 | 0.143 |
| Q | 2.73 | 2.80 | 2.87 | 0.107 | 0.110 | 0.113 |
| θ 1 | 5° | 7° | 9° | 5° | 7° | 9° |
| θ 2 | 1° | 3° | 5° | 1° | 3° | 5° |
| θ 3 | 1° | 3° | 5° | 1° | 3° | 5° |





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