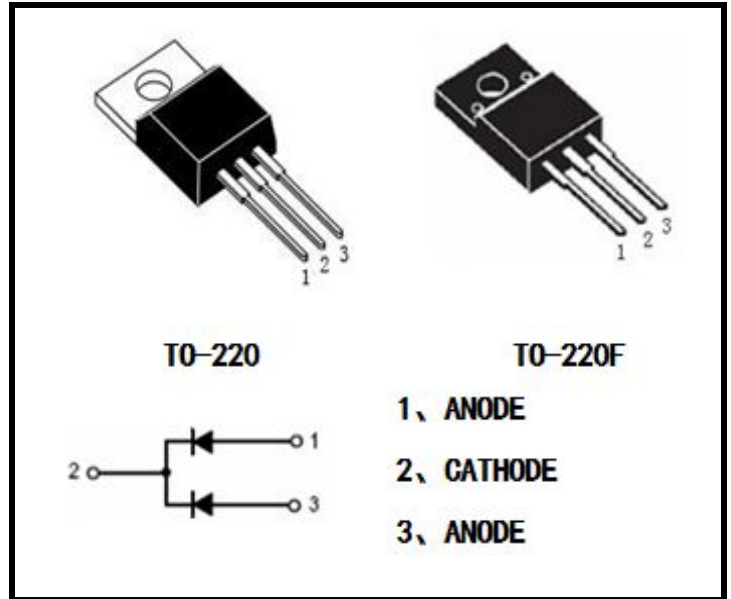


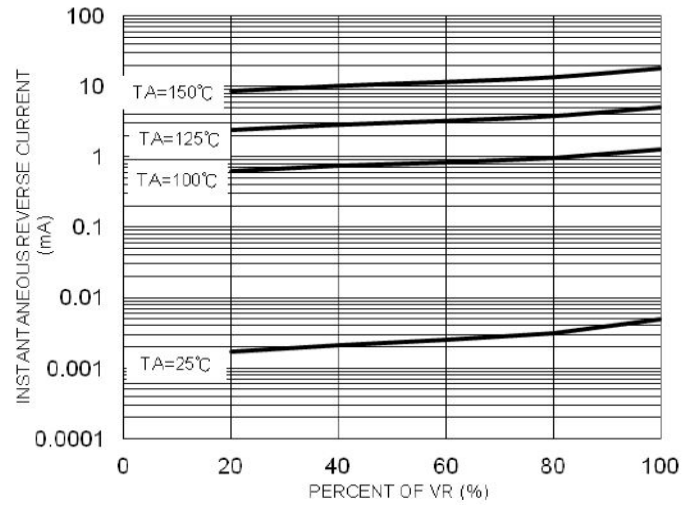
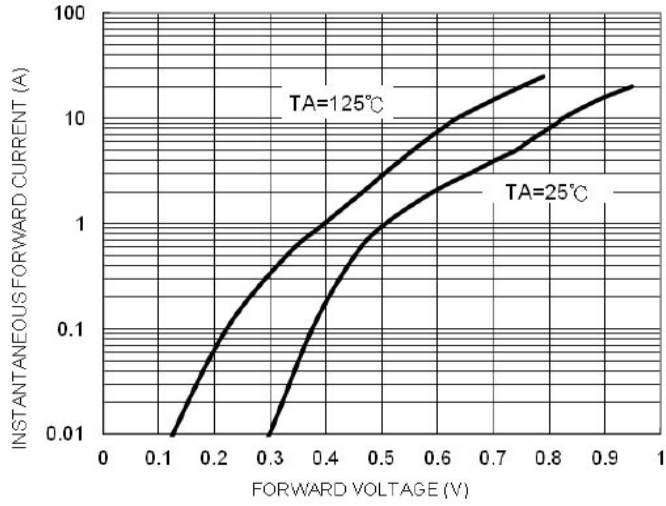
Ultra Low VF=0.55V at IF=5A
FEATURES

- * Schottky Barrier Chip
- * Guard Ring Die Construction for Transient Protection
- * Low Power Loss, High Efficiency
- * High Surge Capability
- * High Current Capability and Low Forward Voltage Drop
- * For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

PACKAGE

ELECTRICAL CHARACTERISTICS (Tamb=25°C)

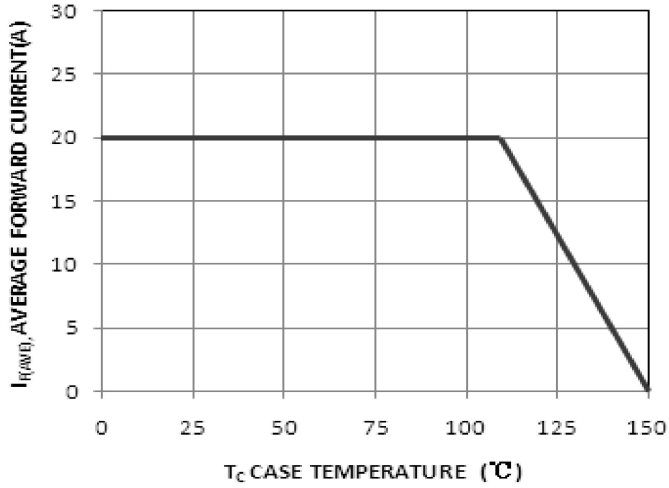
| Characteristic | Symbol | Value | Unit | |
|---|-------------------|-------------|------|------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 150 | V | |
| Working Peak Reverse Voltage | V_{RWM} | | | |
| DC Blocking Voltage | V_R | | | |
| Average Rectified Output Current | $I_{F(per\ leg)}$ | 20 | A | |
| | $I_{F(Total)}$ | 40 | | |
| Non-Repetitive Peak Surge Current (Surge applied at rated load conditions halfwave, single phase, 60Hz) | I_{FSM} | 400 | A | |
| Maximum Instantaneous Forward Voltage @IF=5A, TC=25°C @IF=20A, TC=25°C @IF=5A, TC=125°C @IF=20A, TC=125°C | V_F | TYP. | V | |
| | | 0.71 | | |
| | | 0.95 | | |
| | | 0.55 | | |
| Peak Reverse Current @Tc=25 °C at Rated DC Blocking Voltage @Tc=125°C | I_R | 0.1 | mA | |
| | | 20 | | |
| Operating and Storage Temperature Range | T_J, T_{STG} | -65 to +150 | °C | |
| Maximum Thermal Resistance | θ_{JC} | T0-220 | 2 | °C/W |
| | | T0-220F | 4 | |
| | θ_{JA} | T0-220 | 60 | |
| | | T0-220F | 60 | |

Characteristics Curves



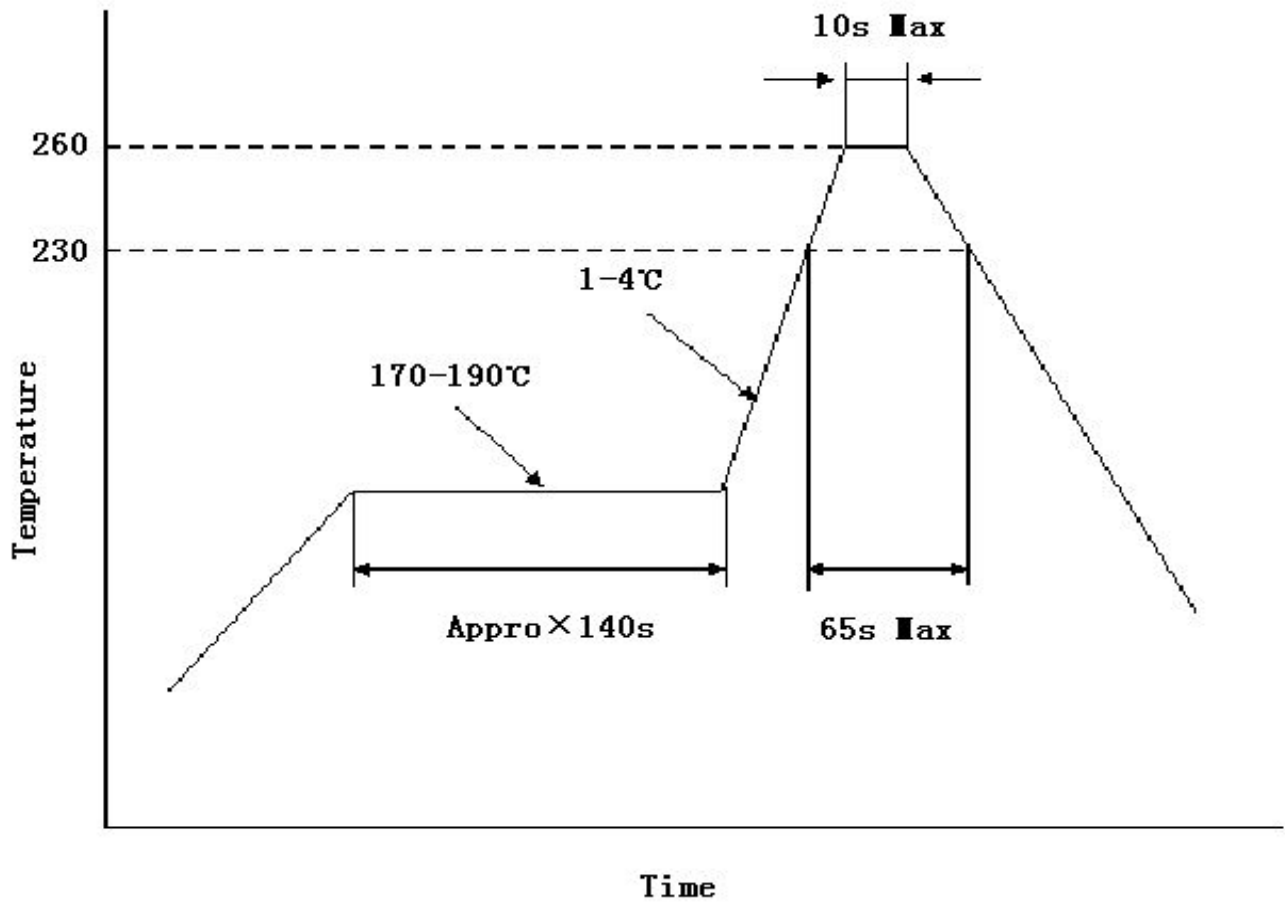
Typical Forward Voltage Per Diode

Typical Reverse Current Per Diode



**Average Forward Forward Current vs.
Case Temperature Per Diode**

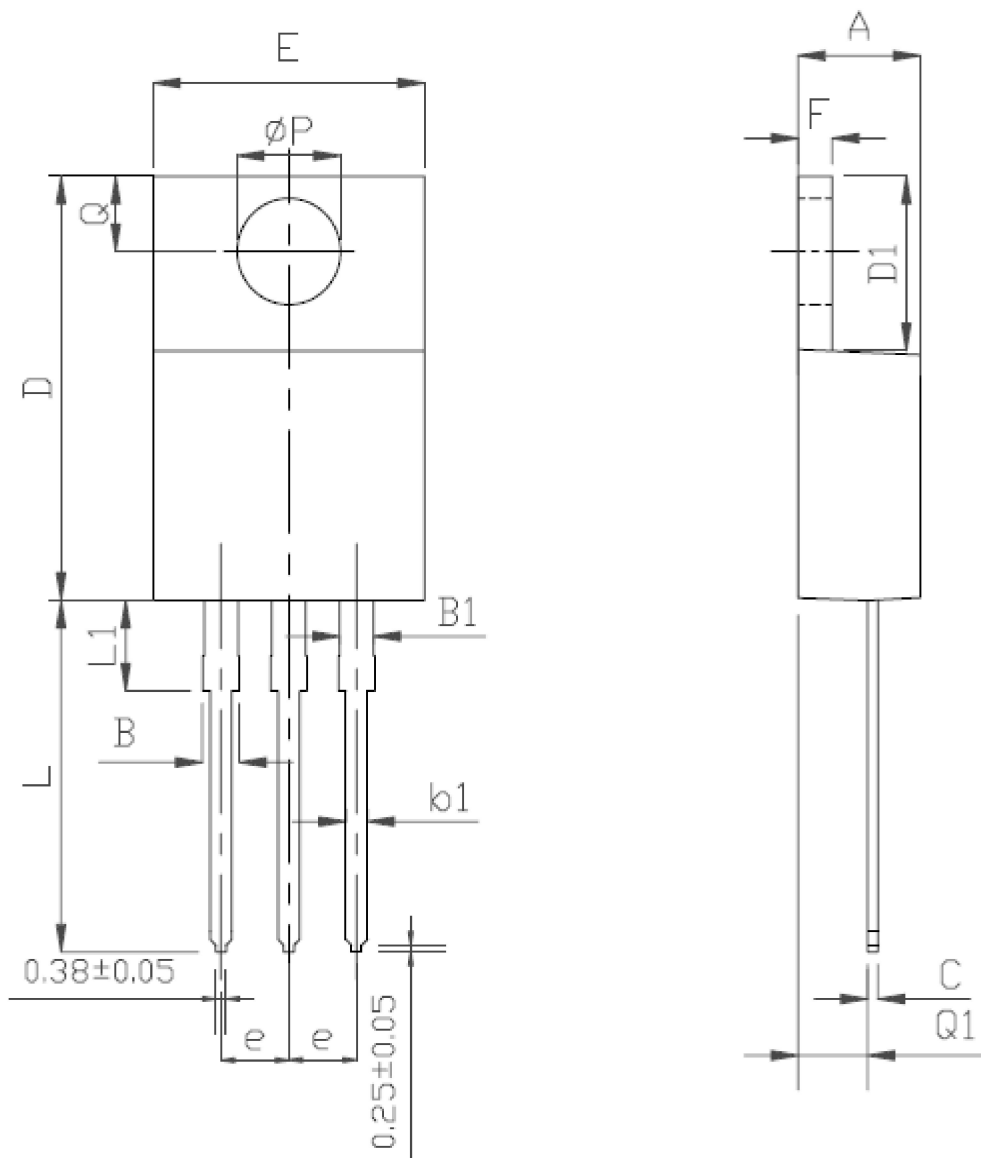
■ Reflow Soldering Temperature Profile



TO-220 MECHANICAL DATA

UNIT: mm

| SYMBOL | MIN | NOM | MAX | SYMBOL | MIN | NOM | MAX |
|--------|------|-----|------|--------|------|------|------|
| A | 4 | | 4.8 | e | 2.44 | 2.54 | 2.64 |
| B | 1.2 | | 1.4 | F | 1.1 | | 1.4 |
| B1 | 1 | | 1.4 | L | 12.5 | | 14.5 |
| b1 | 0.75 | | 0.95 | L1 | 3 | 3.5 | 4 |
| c | 0.4 | | 0.55 | ΦP | 3.7 | 3.8 | 3.9 |
| D | 15 | | 16.5 | Q | 2.5 | | 3 |
| D1 | 5.9 | | 6.9 | Q1 | 2 | | 2.9 |
| E | 9.9 | | 10.7 | | | | |



TO-220F MECHANICAL DATA

UNIT: mm

| SYMBOL | MIN | NOM | MAX | SYMBOL | MIN | NOM | MAX |
|--------|------|-----|------|--------|------|------|-------|
| A | 4.5 | | 4.9 | E1 | 6.5 | 7 | 7.5 |
| A1 | 2.3 | | 2.9 | e | 2.44 | 2.54 | 2.64 |
| b | 0.65 | | 0.9 | L | 12.5 | | 14.3 |
| b1 | 1.1 | | 1.7 | L1 | 9.45 | | 10.05 |
| b2 | 1.2 | | 1.4 | L2 | 15 | | 16 |
| c | 0.35 | | 0.65 | L3 | 3.2 | | 4.4 |
| D | 14.5 | | 16.5 | ΦP | 3 | | 3.3 |
| D1 | 6.1 | | 6.9 | Q | 2.5 | | 2.9 |
| E | 9.6 | | 10.3 | | | | |

