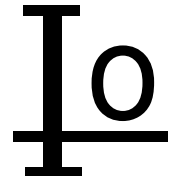


MBR306 0LFCT

Schottky Barrier Diodes Low Forward Voltage
30 A Total



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- Dual rectifier construction
- High temperature soldering guaranteed:260° C/10 seconds,, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/ EU

MECHANICAL DATA

- Case: JEDEC ITO-220AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any
- Weight: 1.81 gram
- * Lead Free Finish/RoHS Compliant

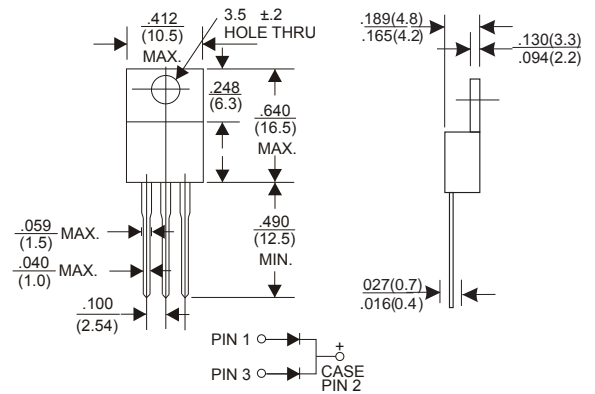
VOLTAGE RANGE

60 Volts

CURRENT

30.0Ampere

ITO-220AB



Dimensions in inches and (millimeters)

RATINGS (Per Diode Leg)

Rating	Symbol	MBR306 0LFCT	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	60	V
Average Rectified Forward Current (Rated V_R) $T_C = 100^\circ\text{C}$	$I_{F(AV)}$	15	A
Peak Repetitive Forward Current (Rated V_R , Square Wave, 20 kHz) $T_C = 100^\circ\text{C}$	I_{FRM}	30	A
Typical Instantaneous Forward Voltage ($i_F = 15\text{Amps}$, $T_C = 25^\circ\text{C}$)	V_F	0.55	V
Nonrepetitive Peak Surge Current (Surge applied at rates load conditions halfwave, single phase, 60Hz)	I_{FSM}	250	A
Peak Repetitive Reverse Surge Current (2.0 μs , 1.0 kHz)	I_{RRM}	5	A
Operating Junction Temperature	T_J	- 65 to +150	$^\circ\text{C}$
Voltage Rate of Change (Rated V_R)	dv/dt	10,000	$\text{V}/\mu\text{s}$
Maximum Instantaneous Reverse Current (Rated dc Voltage, $T_C = 125^\circ\text{C}$) (Rated dc Voltage, $T_C = 25^\circ\text{C}$)	I_R	6.0 0.5	mA

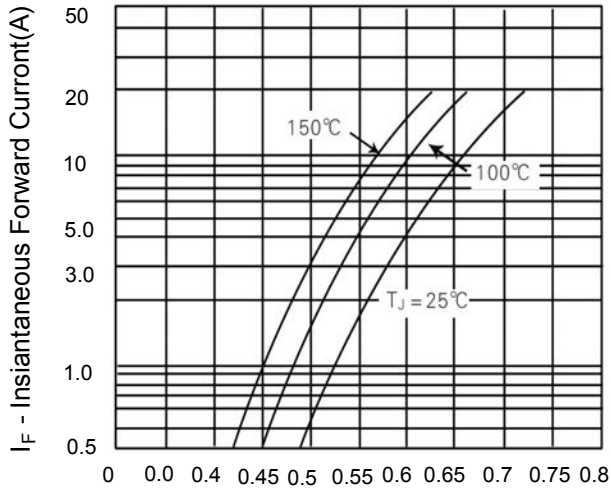


Figure 1. Typical Forward Voltage Per Diode

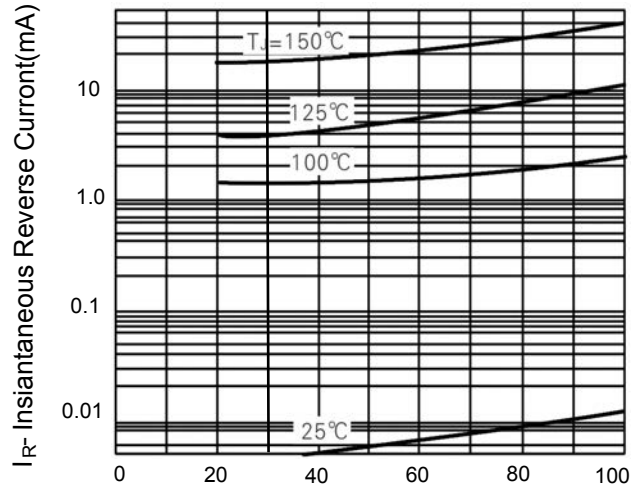


Figure 2. Typical Reverse Current Per Diode

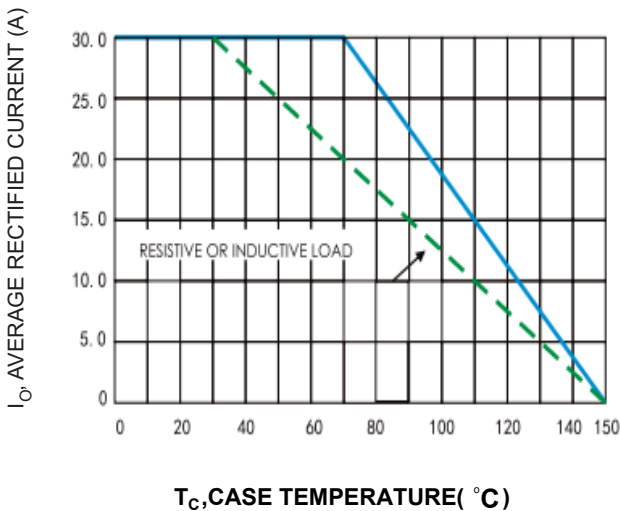


Fig.3 Forward Current Derating Curve

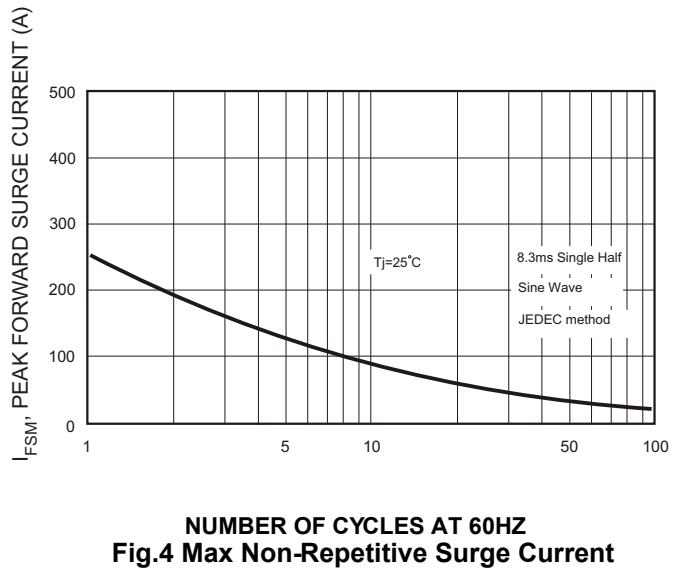


Fig.4 Max Non-Repetitive Surge Current