

**SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - **30 to 60** Volts  
FORWARD CURRENT - **15** Amperes

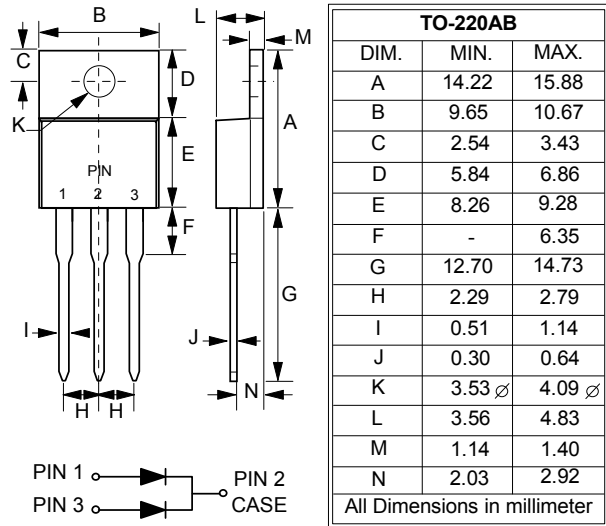
**FEATURES**

- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free-wheeling, and polarity protection applications

**MECHANICAL DATA**

- Case : TO-220AB molded plastic
- Polarity : As marked on the body
- Weight : 0.08 ounces, 2.24 grams
- Mounting position : Any
- Max. mounting torque = 0.5 N.m (5.1 Kgf.cm)

**TO-220AB**



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

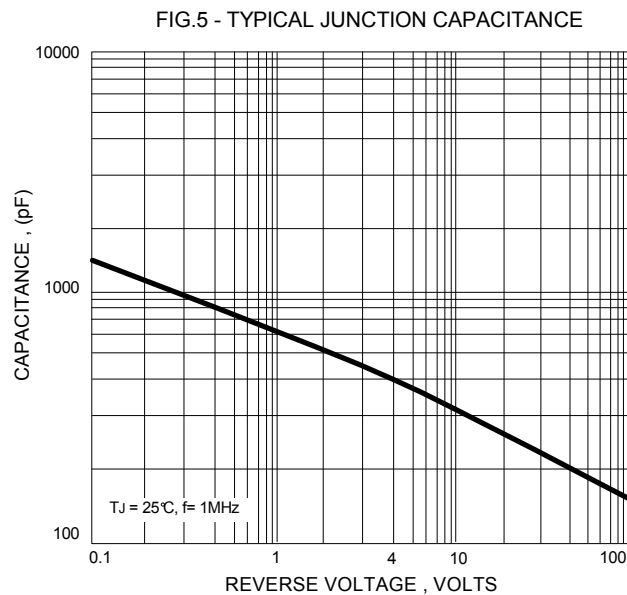
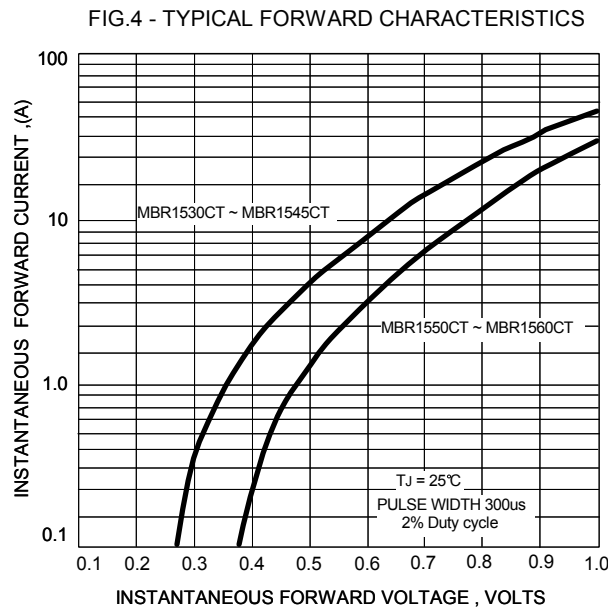
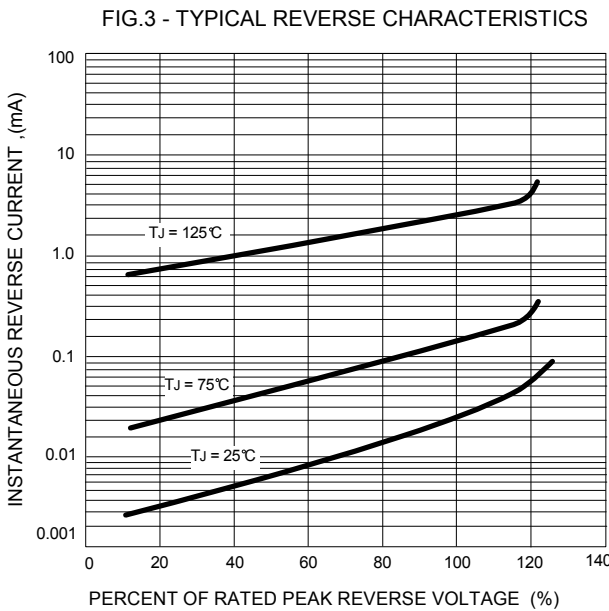
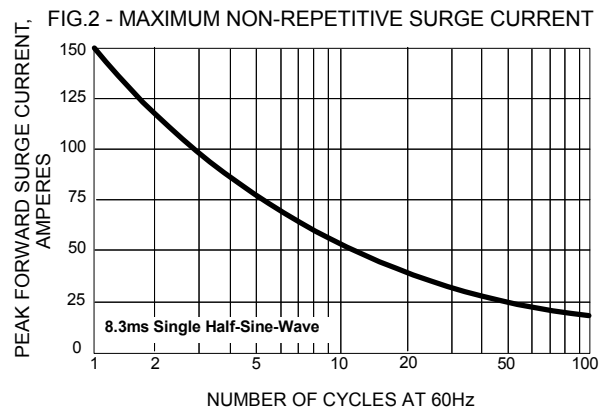
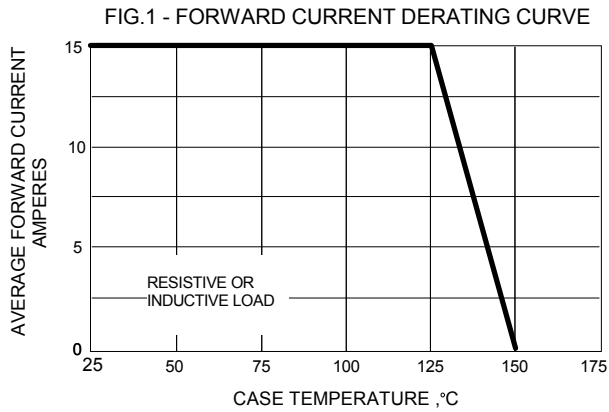
CHARACTERISTICS	SYMBOL	MBR 1530CT	MBR 1535CT	MBR 1540CT	MBR 1545CT	MBR 1550CT	MBR 1560CT	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	30	35	40	45	50	60	V
Maximum RMS Voltage	V <sub>RMS</sub>	21	24.5	28	31.5	35	42	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	30	35	40	45	50	60	V
Maximum Average Forward Rectified Current at T <sub>C</sub> =125°C (See Fig.1)	I <sub>(AV)</sub>	15						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	150						A
Voltage Rate of Change (Rated VR)	dv/dt	10000						V/us
Maximum Forward Voltage, (Note 1)	V <sub>F</sub>	@I <sub>F</sub> =7.5A T <sub>J</sub> =125°C @I <sub>F</sub> =15A T <sub>J</sub> =25°C @I <sub>F</sub> =15A T <sub>J</sub> =125°C		0.57 0.84 0.72		0.65 0.90 0.80		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	@T <sub>J</sub> =25°C @T <sub>J</sub> =125°C		0.1 15		1.0 50		mA
Typical Junction Capacitance, per element (Note 2)	C <sub>J</sub>	400						pF
Typical Thermal Resistance (Note 3)	R <sub>θJC</sub>	3.0						°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150						°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +175						°C

NOTES : 1. 300us Pulse Width, 2% Duty Cycle.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal Resistance Junction to Case.

REV. 5, Oct-2010, KTHC02



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