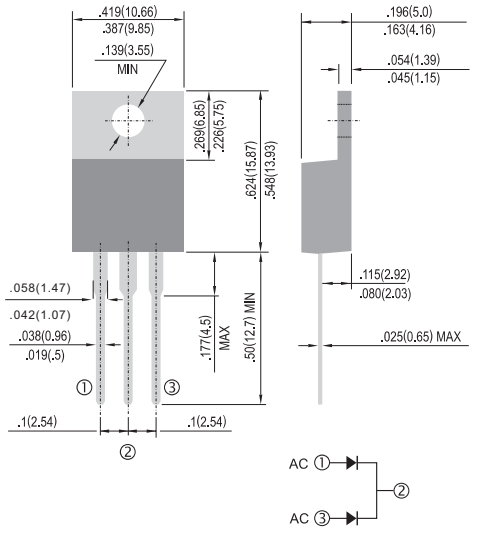
PANJIT SEMI CONDUCTOR

MBR1640CT~MBR16200CT

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 40 to 200 Volts **CURRENT** 16 Amperes

TO-220AB Unit: inch (mm)



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forwrd voltge, high current capability
- High surge capacity.
- For use in low voltage,high frequency inverters free wheeling , and polarlity protection applications.
- In compliance with EU RoHS 2002/95/EC directives

MECHANICALDATA

- Case: TO-220AB molded plastic package
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any
- Weight: 0.0655 ounces, 1.859 grams.

MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

PARAMETER	SYMBOL	MBR1640CT	MBR1645CT	MBR1650CT	MBR1660CT	MBR1680CT	MBR1690CT	MBR16100CT	MBR16150CT	MBR16200CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage	V_{RMS}	28	31.5	35	42	56	63	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward (See Figure 1)	$I_{F(AV)}$	16									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	150									A
Maximum Forward Voltage at 8.0A per leg	V_F	0.70		0.75		0.80			0.90		V
Maximum DC Reverse Current at T_J=25°C Rated DC Blocking Voltag T_J=100°C	I_R	0.05 20									mA
Typical Thermal Resistance	$R_{\theta JC}$	2.0									°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150		-65 to +175							°C

NOTES:Both Bonding and Chip structure are available.

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RATING AND CHARACTERISTIC CURVES

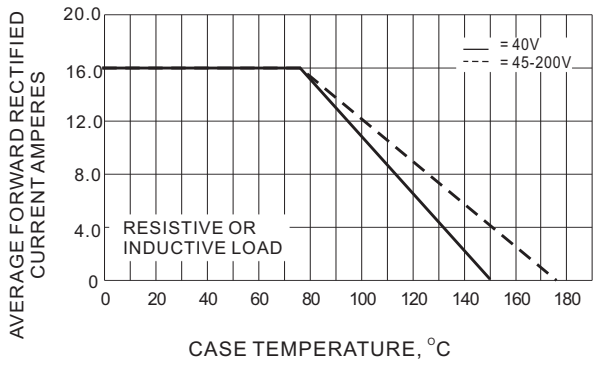

Fig.1- FORWARD CURRENT DERATING CURVE

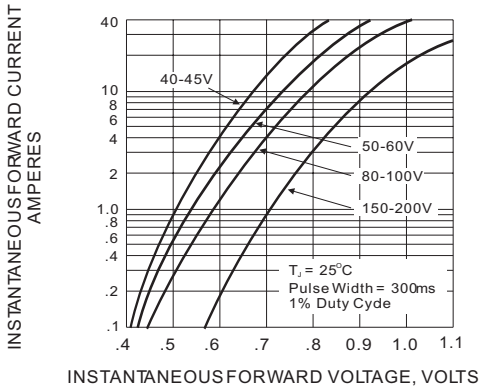

Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

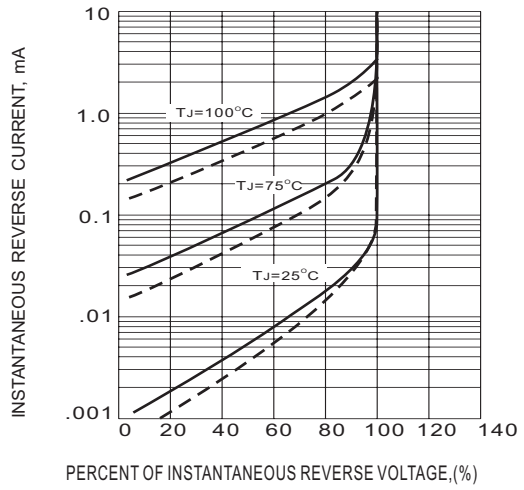

Fig.3- TYPICAL REVERSE CHARACTERISTICS

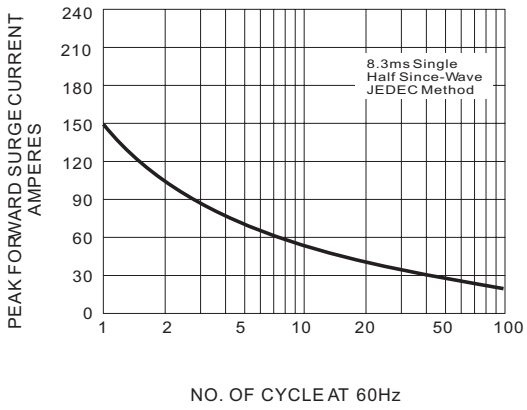

Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT