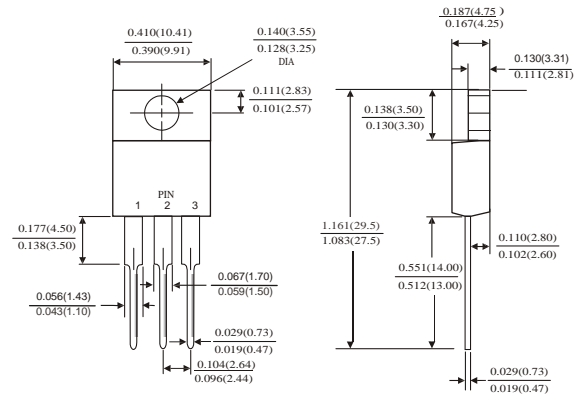


FEATURES

- 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 2002/95/EC and WEEE 2002/96/EC



TO-220AB



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDEC TO-220AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any
- Weight: 0.08ounce, 2.24 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

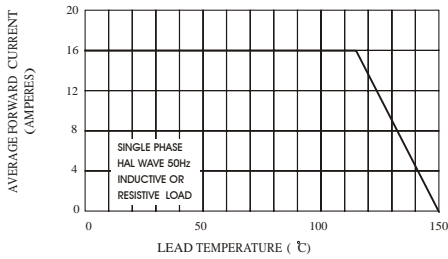
(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load, derate by 20%.)

	Symbols	MBR 1620CT	MBR 1630CT	MBR 1640CT	MBR 1650CT	MBR 1660CT	MBR 1680CT	MBR 16100CT	MBR 16150CT	MBR 16200CT	Units
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum average orward rectified current(see ig. 1)	Per leg	8.0									Amps
	Total device	16.0									
Peak orward surge current 8.3ms single hal sine-wave superimposed on rated load (JEDEC method)	I _{SM}	200.0									Amps
Maximum instantaneous orward voltage at 16.0 A	V	0.60		0.75		0.85		0.90		0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I _R	0.2									mA
		30			50						
Typical thermal resistance (Note 2)	R _{JC} θ	3.0									C/W
Operating junction temperature range	T _J	-65 to +150									C
Storage temperature range	T _{STG}	-65 to +150									C

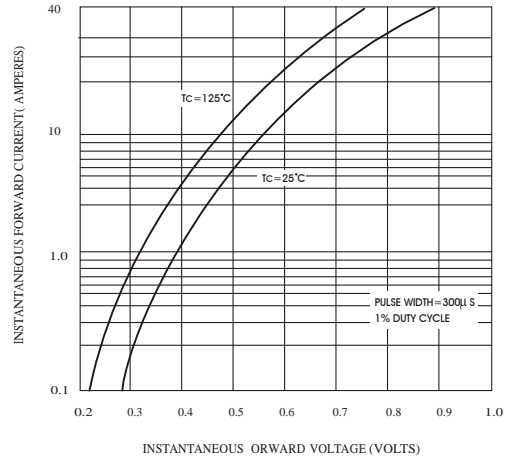
- Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle
2.Thermal resistance rom junction to case

[Http://www.gmsemi.com](http://www.gmsemi.com)

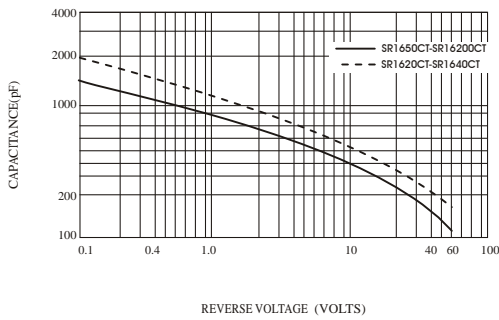
IG.1-FORWARD CURRENT DERATING CURVE



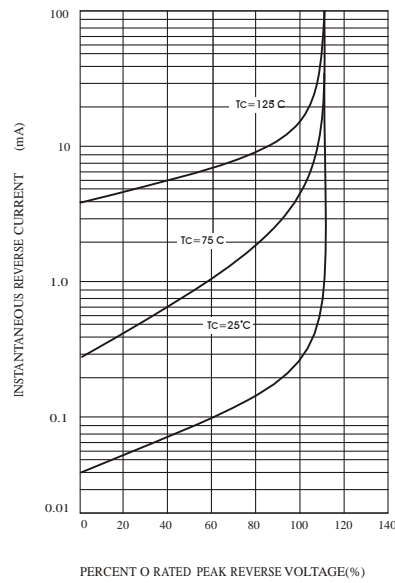
IG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



IG.4-TYPICAL JUNCTION CAPACITANCE



IG.3-TYPICAL REVERSE CHARACTERISTICS



IG.5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

