SEMICONDUCTOR

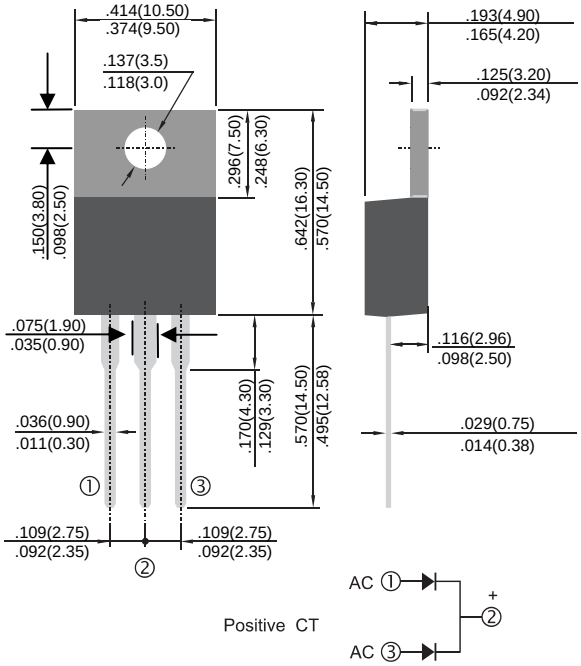
DATA SHEET

MBR1620FCT THRU MBR16150FCT

16 AMPERE SCHOTTKY BARRIER RECTIFIERS

VOLTAGE - 20 to 150 Volts CURRENT - 16.0 Amperes

ITO-220AB Unit:inch(mm)



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency
- Low forward voltage, high current capability
- High surge capacity
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

MECHANICAL DATA

- Case: ITO-220AB molded plastic
- Terminals: Lead, solderable per MIL-STD-202, Method 208
- Polarity: As marked
- Mounting Position: Any

Ordering Information	
Part Number	**Remark**
MBR16xxxFCT-F	General
MBR16xxxFCT-H	Halogen Free
MBR16xxxFCT-A	AEC-Q101 qualified

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

SYMBOL	MBR 1620FCT	MBR 1630FCT	MBR 1640FCT	MBR 1650FCT	MBR 1660FCT	MBR 1680FCT	MBR 16100FCT	MBR 16150FCT	UNIT
Maximum Recurrent Peak Reverse Volt	20	30	40	50	60	80	100	150	V
Maximum RMS Volt	14	21	28	35	42	56	70	105	V
Maximum DC Blocking Volt	20	30	40	50	60	80	100	150	V
Maximum Average Forward Rectified Current at TC=90°C	16.0								A
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load(JEDEC method)	150							120	A
Maximum Forward Voltage at 8.0A per element	0.55			0.75		0.85		0.92	V
Maximum DC Reverse Current at Rated TC=25 °C	0.1							0.025	mA
DC Blocking Voltage per element TC=100°C	100							7	mA
Typical Thermal Resistance Note RθJA	60								°C /W
Operating and Storage Temperature Range TJ,TSTG	-55 to +150								°C

NOTES:
Thermal Resistance Junction to Ambient

DEVICE CHARACTERISTICS

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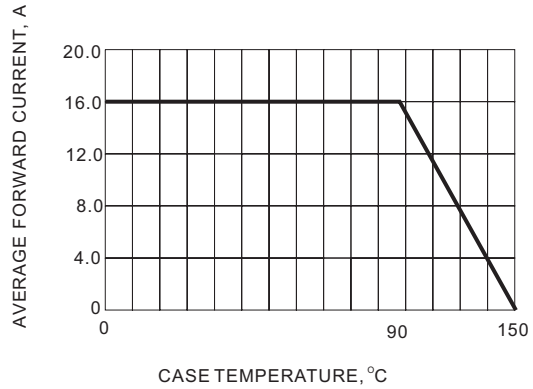


Fig.1- FORWARD CURRENT DERATING CURVE

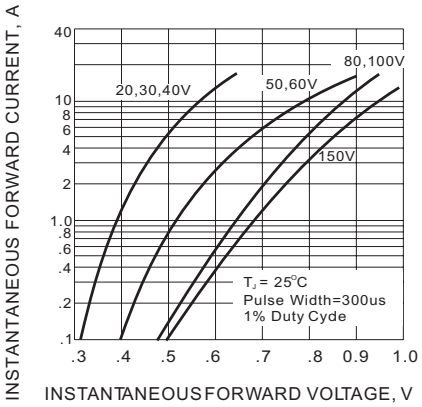


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHRACTERISTICS

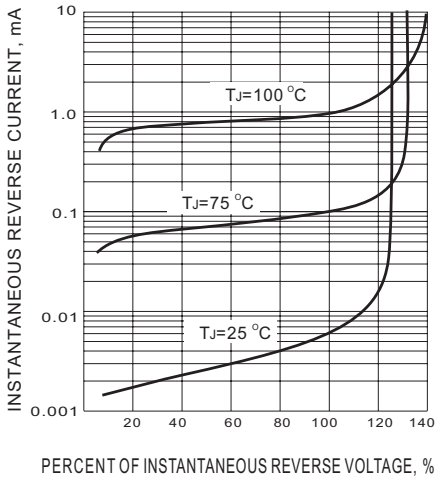


Fig.3- TYPICAL REVERSE CHARACTERISTIC

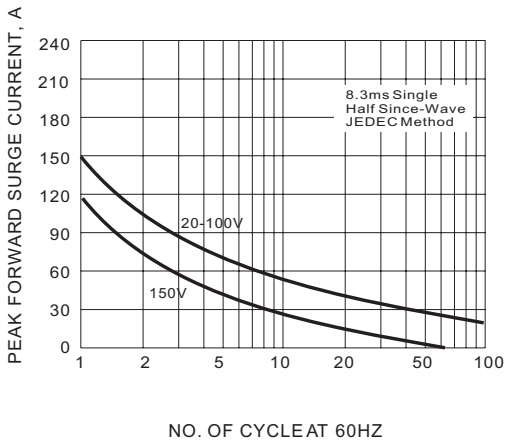
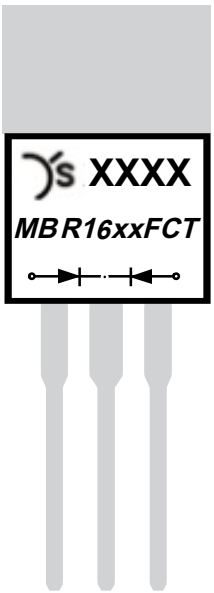


Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT

Marking Information



Line 1: YS Logo and Date code

The first half of Line 1: YS logo

The second half of Line 1:

YYWW: Year,

YY**WW**: Week.

Line 2 : Device name and Package type

MBR: Schottky Barrier Rectifier

16xx: 16 Ampere Series product.

16**xx**: The peak reverse Voltage of product.

Line 3 : Device Structure symbol