MBR1620 THRU MBR16200

16.0AMP. SCHOTTKY BARRIER RECTIFIERS

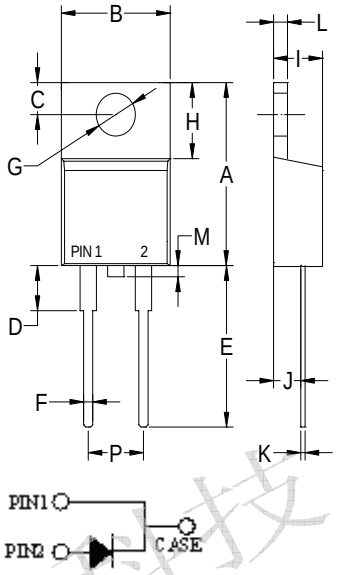
FEATURE

- .High current capability,
- .Low forward voltage drop
- .Low power loss, high efficiency
- .High surge capability
- .High temperature soldering guaranteed 260°C /1 0sec/0.375" lead length at 5 lbs tension

MECHANICAL DATA

- .Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
- .Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
- .Polarity: color band denotes cathode
- .Mounting position: any

TO-220A



Dim	Min	Max
A	14.9	15.8
B	———	10.5
C	2.62	2.87
D	3.56	4.06
E	13.0	14.3
F	0.68	0.94
G	Φ3.74	Φ3.91
H	5.84	6.86
I	4.44	4.86
J	2.54	2.79
K	0.35	0.64
L	1.14	1.40
P	5.20	4.95
M	———	0.50

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

Type Number	SYMBOL	MBR 1620	MBR 1630	MBR 1640	MBR 1650	MBR 1660	MBR 1680	MBR 16100	MBR 16150	MBR 16200	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Tc=90 C	$I_{F(AV)}$	16.0									A
Peak Forward Surge Current 8.3ms singlehalf sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	250									A
Maximum Forward Voltage at 16.0A DC	V_F	0.55			0.70		0.85		0.95		V
Maximum DC Reverse Current@Ta =25°C	I_R	1.0					0.5				mA
at rated DC blocking voltage @Ta =100°C		50.0					40.0				mA
Typical Junction Capacitance (Note1)	C_J	700					300				pF
Typical Thermal Resistance (Note2)	$R_{(JA)}$	2.0									°C/W
Storage Temperature	T_{STG}	-55 to +150									°C
Operating Junction Temperature	T_J	-55 to +125			-55 to +150						°C

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance Junction to Case.

RATING AND CHARACTERISTIC CURVES (MBR1620 THRU MBR16200)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

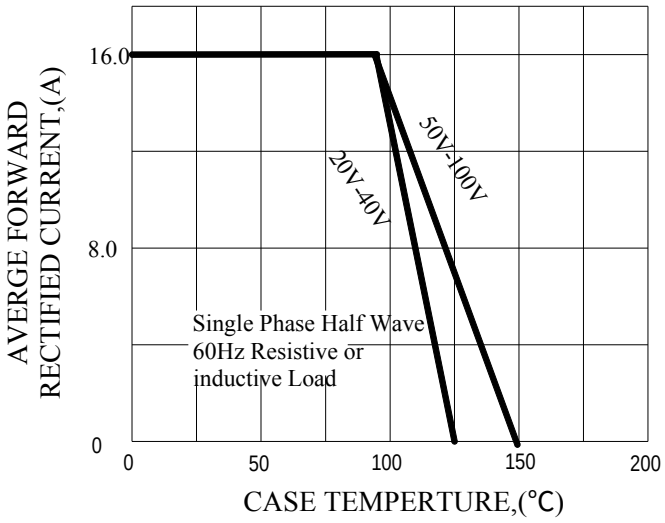


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

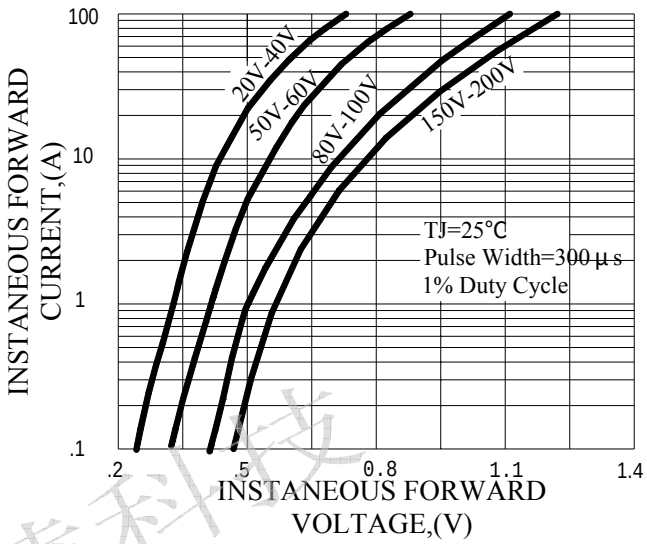


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

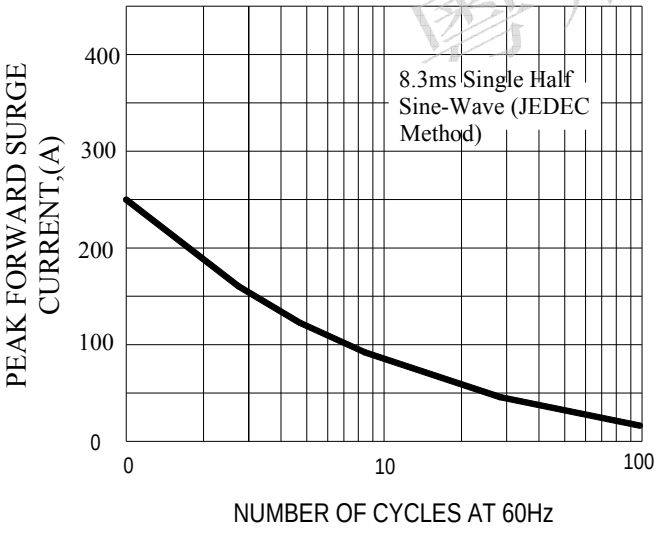


FIG.4-TYPICAL REVERSE CHARACTERISTICS