

MBR2060CT thru 20100CT

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 60 to 100 Volts
FORWARD CURRENT - 20 Amperes

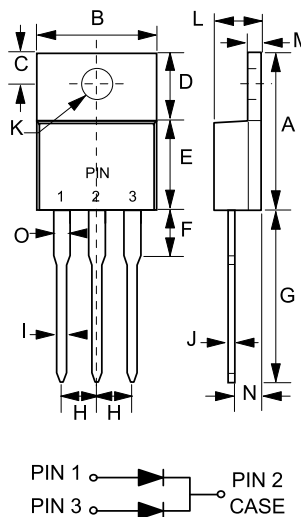
FEATURES

- Metal of silicon rectifier, majority carrier conduct on
- 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



TO-220AB		
DIM.	MIN.	MAX.
A	14.40	15.20
B	9.65	10.67
C	2.54	3.43
D	5.84	6.86
E	8.26	9.28
F	-	4.20
G	12.70	14.73
H	2.29	2.79
I	0.51	1.14
J	0.30	0.64
K	3.53 \varnothing	4.09 \varnothing
L	3.56	4.83
M	1.14	1.40
N	2.03	2.92
O	1.14	1.70

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	MBR2060CT	MBR2080CT	MBR2090CT	MBR20100CT	UNIT
Maximum Recurrent Peak Reverse Voltage @IR=100uA	VRRM	60	80	90	100	V
Maximum RMS Voltage @IR=100uA	VRMS	42	56	63	70	V
Maximum DC Blocking Voltage @IR=100uA	VDC	70	80	90	100	V
Maximum Average Forward Rectified Current (See Fig.1) Tc=120	IAV	20				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	IFSM	150				A
Voltage Rate of Change (Rated VR)	dv/dt	10000				V/us
Maximum Forward Voltage (Note 1)	VF	0.75 0.85 0.85 0.95				V
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	0.15 10				mA
Typical Thermal Resistance (Note 2)	RθJC	2.0				/W
Typical Junction Capacitance per element (Note 3)	CJ	250				pF
Operating Temperature Range	TJ	-55 to +150				
Storage Temperature Range	TSTG	-55 to +175				

- NOTES : 1. 300us Pulse Width, 2% Duty Cycle.
2. Thermal Resistance Junction to Case.
3. Measured at 1.0MHz and applied reverse voltage of 4.0V DC

RATING AND CHARACTERISTIC CURVES

MBR2060CT thru MBR20100CT

FIG.1 - FORWARD CURRENT DERATING CURVE

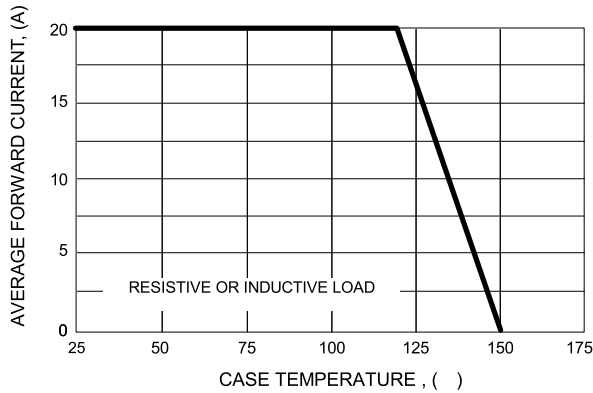


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

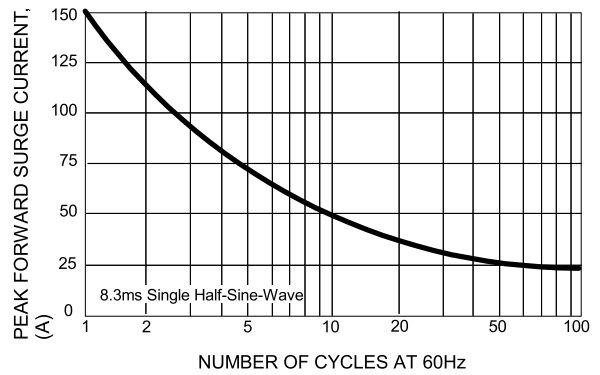


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

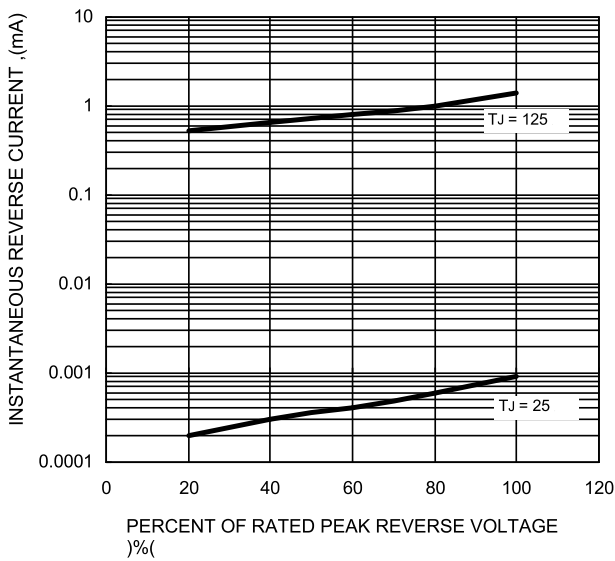


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

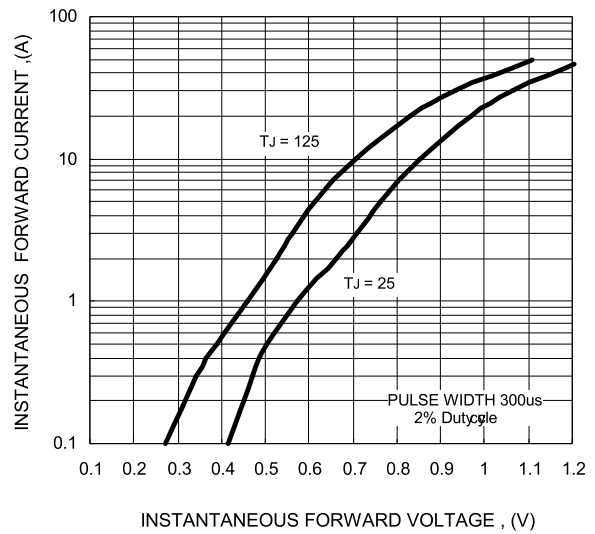
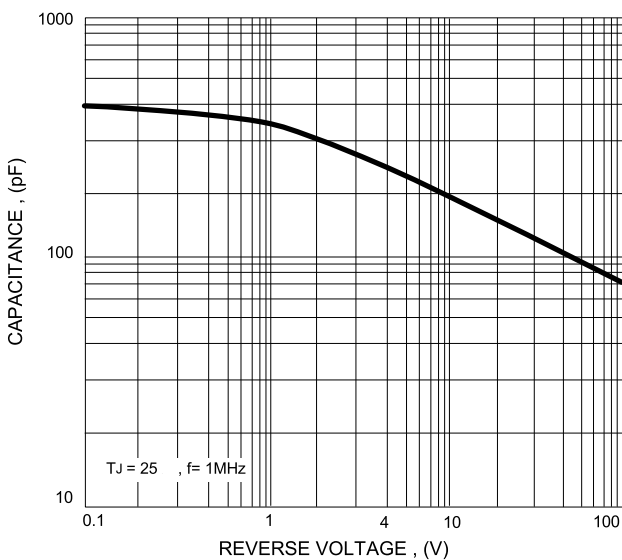


FIG.5 - TYPICAL JUNCTION CAPACITANCE



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