

**SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - 70 to 100 Volts  
FORWARD CURRENT - 20 Amperes

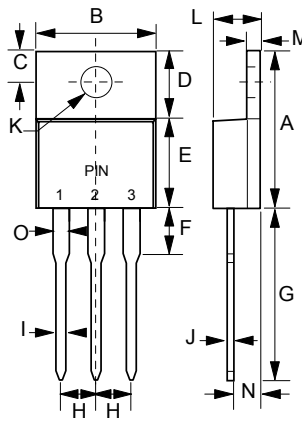
**FEATURES**

- Metal of silicon rectifier, majority carrier conduction
- 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
- IEC 61000-4-2, level 4 (ESD), >15KV (air)

**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

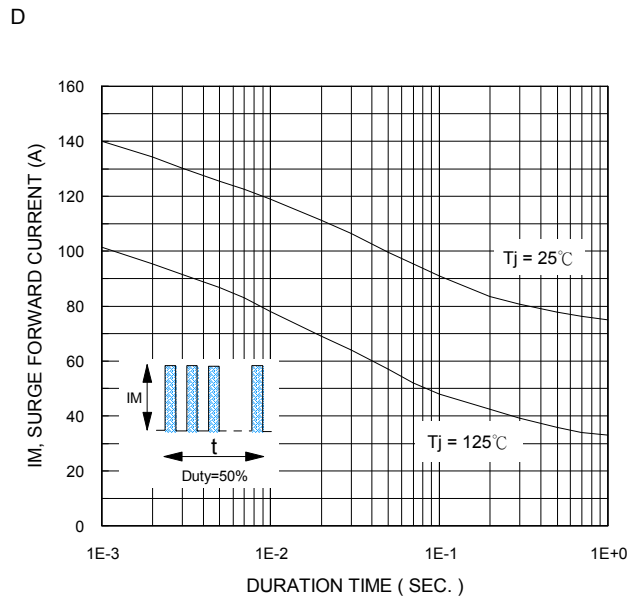
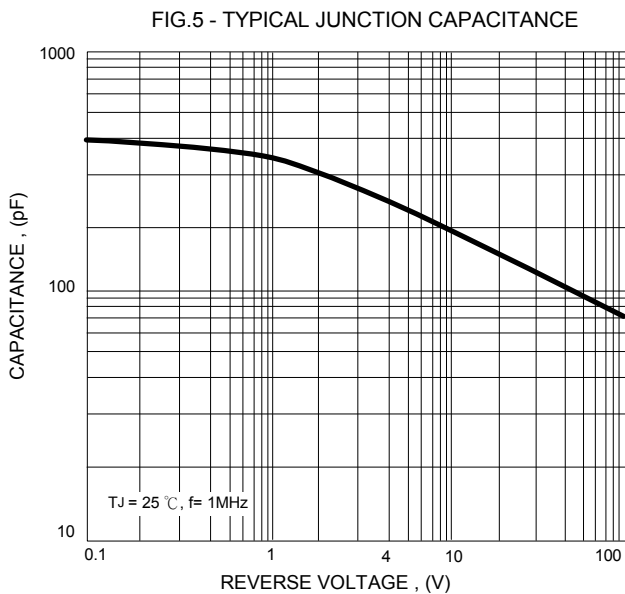
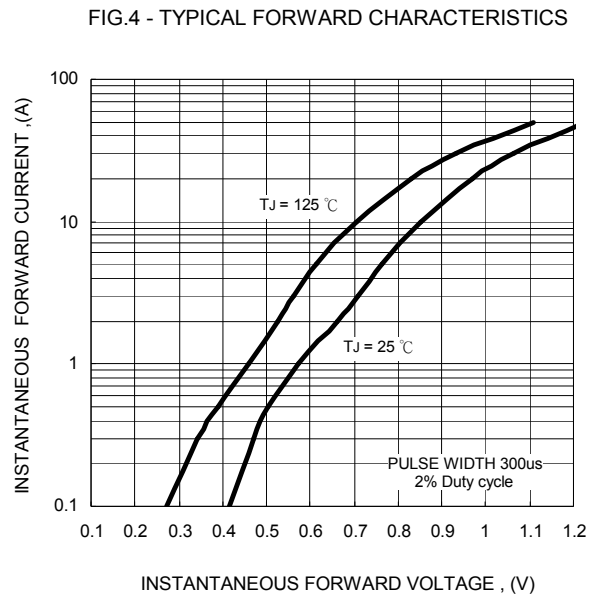
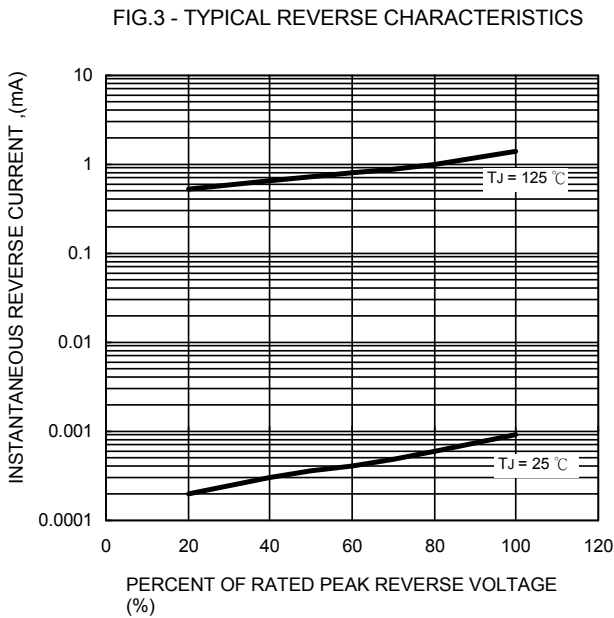
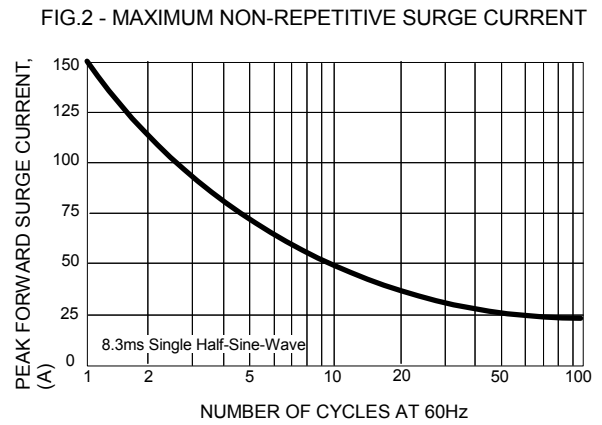
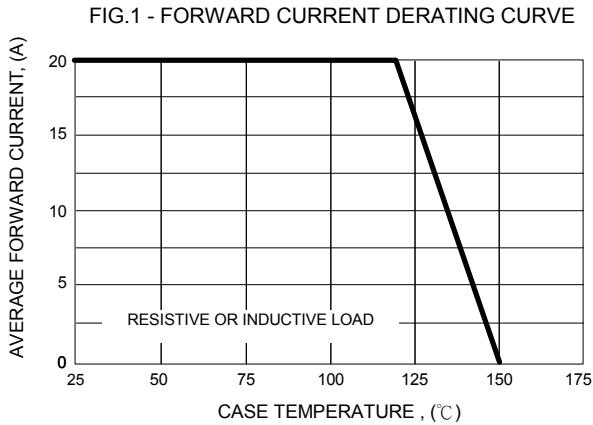
**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	MBR2070CT	MBR2080CT	MBR2090CT	MBR20100CT	UNIT
Maximum Recurrent Peak Reverse Voltage @IR=100uA	VRRM	70	80	90	100	V
Maximum RMS Voltage @IR=100uA	VRMS	49	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 °C	I(AV)	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) IF=10A @ Tj=125 °C, IF=10A @ Tj=25 °C, IF=20A @ Tj=125 °C, IF=20A @ Tj=25 °C	VF	0.75, 0.85, 0.85, 0.95				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @Tj=25 °C, @Tj=125 °C	IR	0.01, 10				mA
Typical Thermal Resistance (Note 2)	RθJC	2.0				°C/W
Typical Junction Capacitance per element (Note 3)	CJ	250				pF
Operating Temperature Range	TJ	-55 to +150				°C
Storage Temperature Range	TSTG	-55 to +175				°C

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.

REV. 14, Jul-2012, KTHC09



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