LITE-ON SEMICONDUCTOR

MBRF1060

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE **- 60** Volts
FORWARD CURRENT **- 10** Amperes

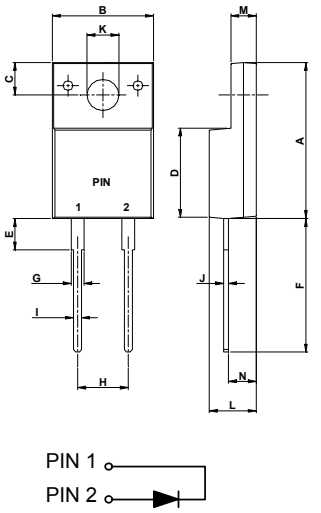
FEATURES

- Metal of silicon rectifier,majority carrier conducton
- 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 whelling,and polarity protection applications

MECHANICAL DATA

- Case : ITO-220AC molded plastic
- Polarity : As marked on the body
- Weight : 0.06 ounces, 1.70 grams
- Mounting position : Any
- Max. mounting torque = 0.5 N.m (5.1 Kgf.cm)

ITO-220AC



ITO-220AC		
DIM.	MIN.	MAX.
A	15.50	16.50
B	10.0	10.40
C	3.00	3.50
D	9.00	9.30
E	2.90	3.60
F	13.46	14.22
G	1.15	1.70
H	4.83	5.33
I	0.75	1.00
J	0.45	0.70
K	3.00⌀	3.30⌀
L	4.36	4.77
M	2.48	2.80
N	2.50	2.80
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

CHARACTERISTICS		SYMBOL	MBRF1060	UNIT
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	60	V
Maximum RMS Voltage		V_{RMS}	42	V
Maximum DC Blocking Voltage		V_{DC}	60	V
Maximum Average Forward Rectified Current (See Fig.1)	@T_C=125℃	$I_{(AV)}$	10	A
Peak Forward Surge Current 8.3ms single half sine-wave	T_A =25℃	I_{FSM}	150	A
Maximum Forward Voltage at IF = 10A	T_J =25℃	V_F	0.65	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_J =25℃ @T_J =125℃	I_R	0.1 25	mA
Typical Thermal Resistance (Note 1)		$R_{\theta JC}$	2.5	℃/W
Typical Junction Capacitance (Note 2)		C_J	400	pF
Operating Temperature Range		T_J	-55 to +150	℃
Storage Temperature Range		T_{STG}	-55 to +175	℃
Dielectric Strengh from terminals to case, AC with t=1 minute, RH<30%		V_{dis}	2000	V

NOTES : 1.Thermal Resistance Junction to Case.
2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3.Device mounted on 135mm x 135mm x 8mm Alumium Plate Heatsink.

REV. 2, Oct-2010, KTHC43

RATING AND CHARACTERISTIC CURVES
MBRF1060

FIG.1 - FORWARD CURRENT DERATING CURVE

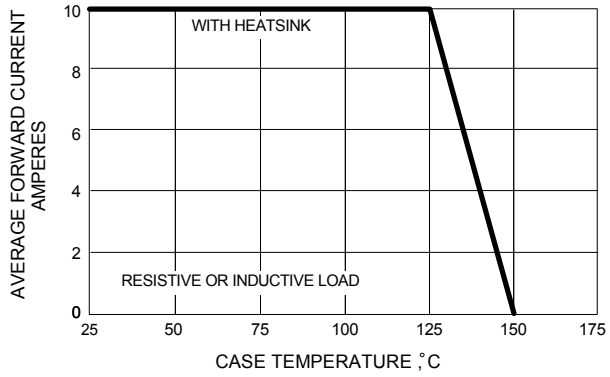


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

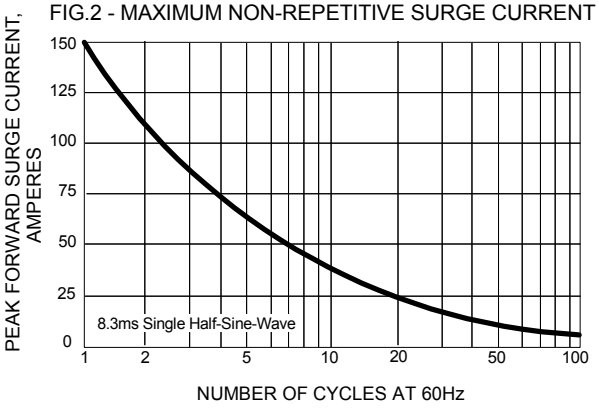


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

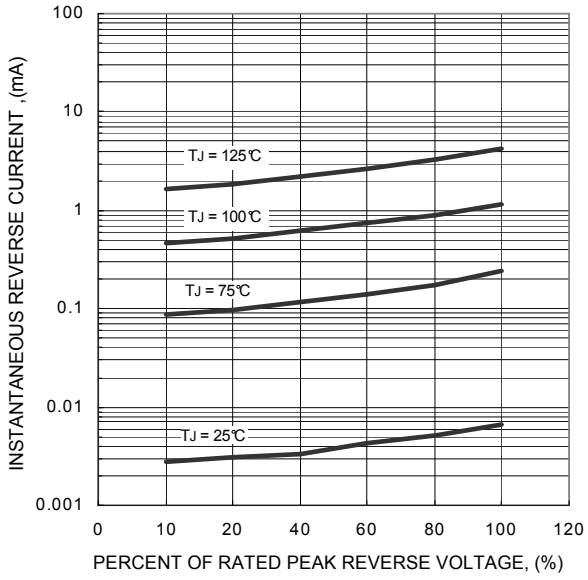


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

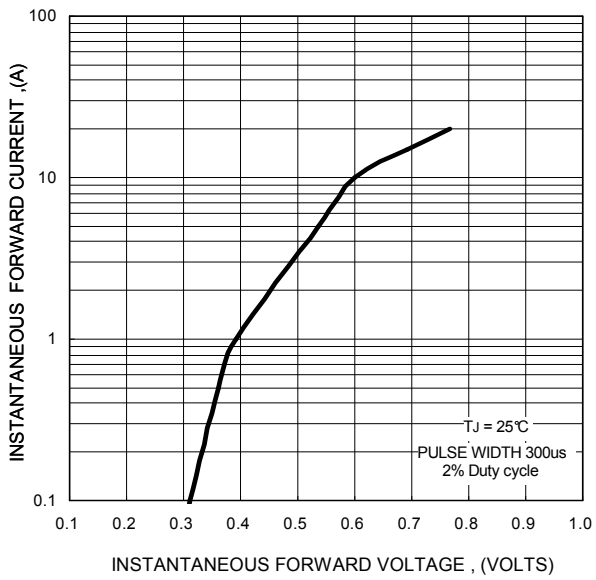
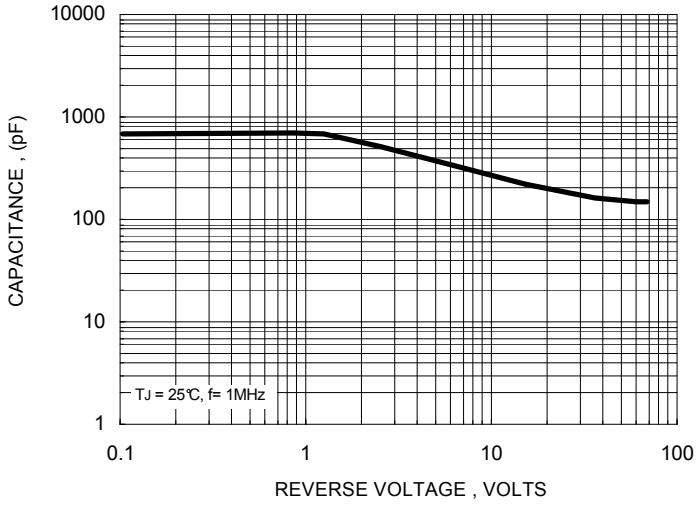


FIG.5 - TYPICAL JUNCTION CAPACITANCE



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