

**SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - **45** Volts  
FORWARD CURRENT - **10** Amperes

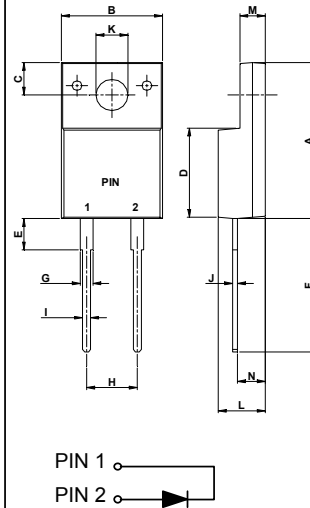
**FEATURES**

- 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

**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**



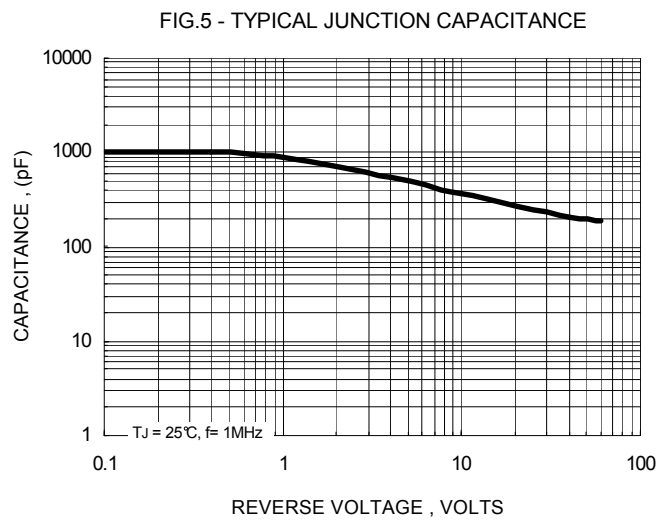
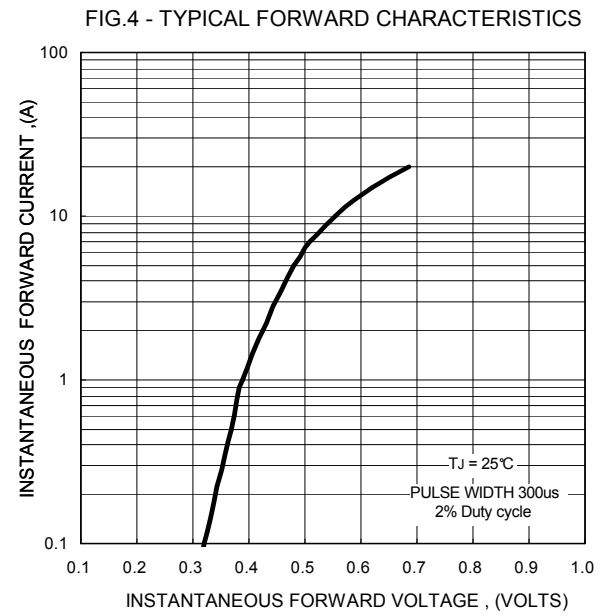
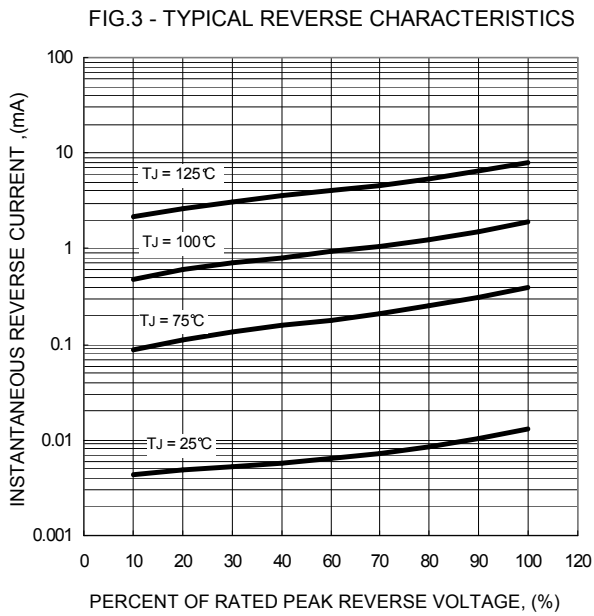
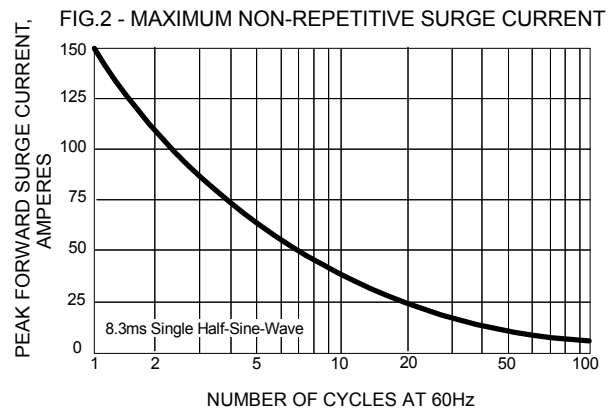
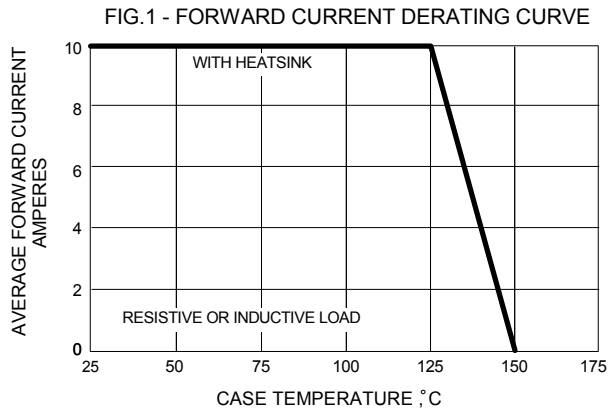
ITO-220AC		
DIM.	MIN.	MAX.
A	15.50	16.50
B	10.0	10.40
C	3.00	3.50
D	9.00	9.30
E	2.90	3.60
F	13.46	14.22
G	1.15	1.70
H	4.83	5.33
I	0.75	1.00
J	0.45	0.70
K	3.00 $\varnothing$	3.30 $\varnothing$
L	4.36	4.77
M	2.48	2.80
N	2.50	2.80
All Dimensions in millimeter		

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	MBRF1045	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	45	V
Maximum RMS Voltage	VRMS	31.5	V
Maximum DC Blocking Voltage	VDC	45	V
Maximum Average Forward Rectified Current (See Fig.1) @TC=125°C	I(AV)	10	A
Peak Forward Surge Current 8.3ms single half sine-wave TA=25°C	IFSM	150	A
Maximum Forward Voltage at IF = 10A TJ=25°C	VF	0.57	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ=25°C @TJ=125°C	IR	0.1 15	mA
Typical Thermal Resistance (Note 1)	R $\theta$ JC	2.5	°C/W
Typical Junction Capacitance (Note 2)	CJ	570	pF
Operating Temperature Range	TJ	-55 to +150	°C
Storage Temperature Range	TSTG	-55 to +175	°C
Dielectric Strength from terminals to case, AC with t=1 minute, RH<30%	Vdis	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 8 mm Aluminum Plate Heatsink.



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