

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 30 to 45 Volts
FORWARD CURRENT - 10 Amperes

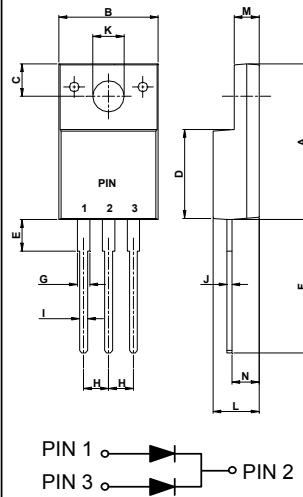
FEATURES

- 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-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)

ITO-220AB



ITO-220AB		
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	2.40	2.70
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°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	SBF1030CT	SBF1035CT	SBF1040CT	SBF1045CT	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	30	35	40	45	V
Maximum RMS Voltage	VRMS	21	24.5	28	31.5	V
Maximum DC Blocking Voltage	VDC	30	35	40	45	V
Maximum Average Forward Rectified Current (See Fig.1) @TC=95°C	I(AV)	10				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	IFSM	150				A
Maximum Forward Voltage at 5A DC (Note 1)	VF	0.55				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ=25°C @TJ=100°C	IR	0.5 50				mA
Typical Junction Capacitance per element (Note 2)	CJ	350				pF
Typical Thermal Resistance (Note 3)	RθJC	5.0				°C/W
Operating Temperature Range	TJ	-55 to +125				°C
Storage Temperature Range	TSTG	-55 to +150				°C
Dielectric Strength from terminals to case, AC with t=1 minute, RH<30%	Vdis	2000				V

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

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FIG.1 - FORWARD CURRENT DERATING CURVE

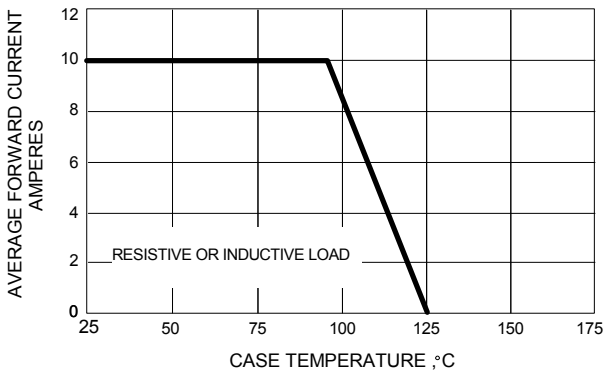


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

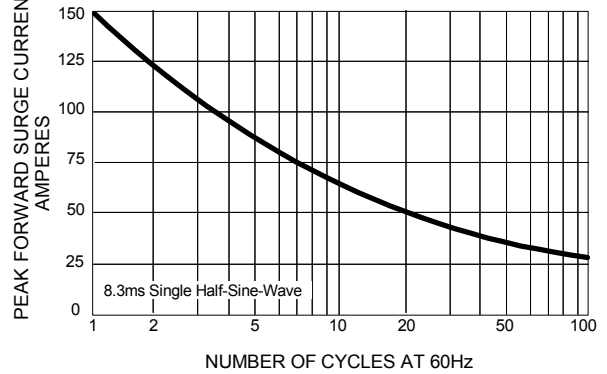


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

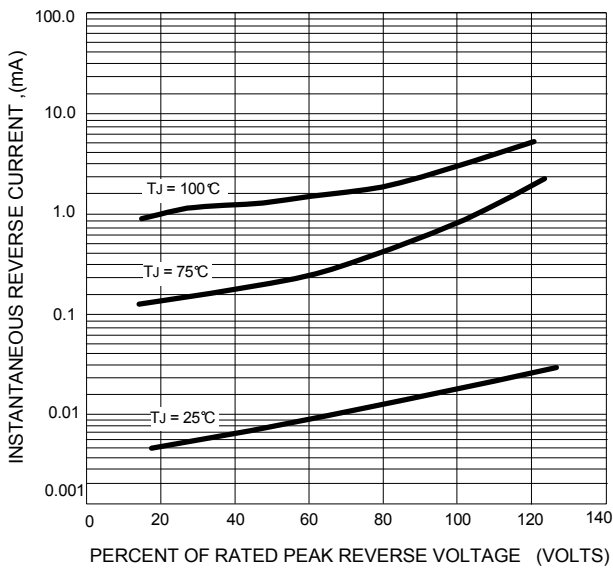


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

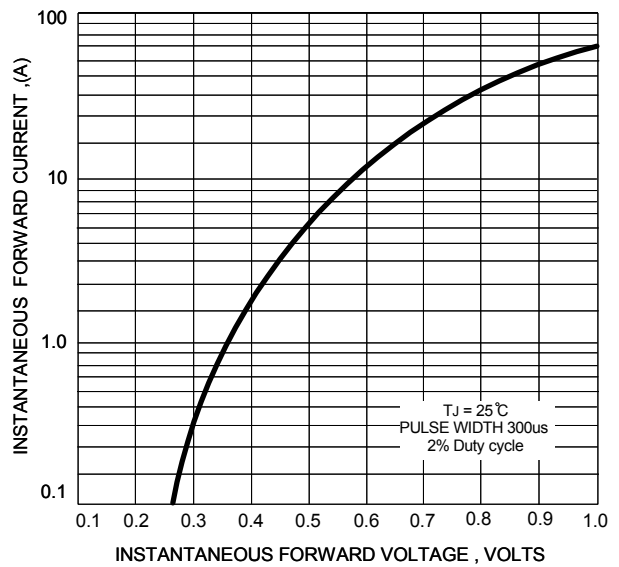


FIG.5 - TYPICAL JUNCTION CAPACITANCE

