

TRENCH SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE – 120 Volts
FORWARD CURRENT – 20 Amperes

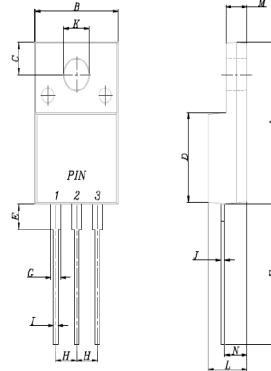
FEATURES

- Trench schottky technology
- Low power loss, high efficiency
- Low forward drop voltage
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

MECHANICAL DATA

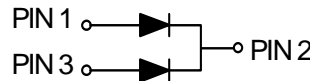
- Case : ITO-220AB molded plastic
- Case Material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl.) "Halogen-free".
- Lead Free Finish, RoHS compliant
- Polarity : As marked on the body
- Wight : 1.558grams(Approximate)
- Mounting position : Any
- Max. mounting torque = 0.5 N.m (5.1 Kgf-cm)
- Marking code:G20120CTSW

ITO-220(S)AB(WB)



ITO-220(S)AB		
DIM	MIN	MAX
A	14.95	15.95
B	10.00	10.40
C	2.76	3.36
D	8.50	8.80
E	2.10	2.50
F	13.00	13.70
G	1.15	1.37
H	2.40	2.70
I	0.50	0.80
J	0.45	0.70
K	3.00	3.30
L	4.46	4.87
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.

ABSOLUTE RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	120	V
Maximum DC blocking voltage	V_{DC}	120	V
Maximum Average rectified output current	$I_{(AV)}$	20	A
@ $T_C = 100^\circ C$			
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load.	I_{FSM}	120	A
Operating and Storage temperature range	T_J, T_{STG}	-55 to +150	°C

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION	SYMBOL	TYP	MAX	UNIT
Forward voltage (Note1)	$I_F=10A$ $T_J=25^\circ C$ $T_J=125^\circ C$	V_F	0.77 0.62	0.84 0.72	V
Leakage current	$V_R=120V$ $T_J=25^\circ C$ $T_J=125^\circ C$	I_R	-- 15	150 25	uA mA
Typical junction capacitance (Note2)		C_j	410		pF

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP	UNIT
Typical thermal resistance (Note3,4)	R_{thJc} R_{thJA}	3 8	°C/W

Note :

- (1) 300us pulse width, 2% duty cycle.
- (2) Measured at 1.0MHz and applied reverse voltage of 4.0 VDC
- (3) Thermal Resistance Junction to Case,Lead and Ambient
- (4) Thermal Resistance test performed in accordance with JESD-51

REV. 0 , Jul.-2015, KTHC133

FIG.1- FORWARD CURRENT DERATING CURVE

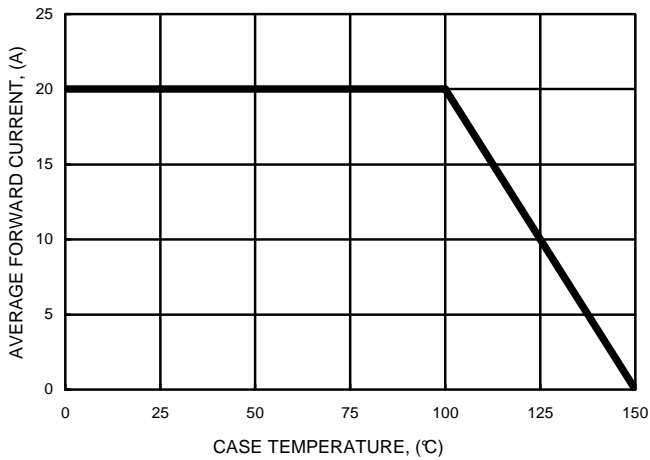


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

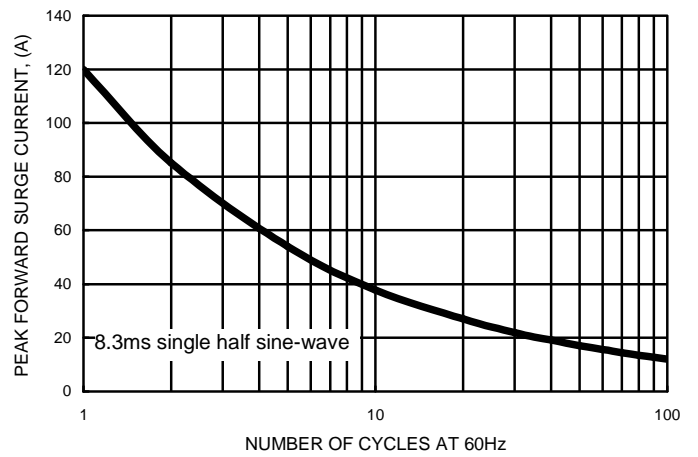


FIG.3- TYPICAL FORWARD CHARACTERISTICS

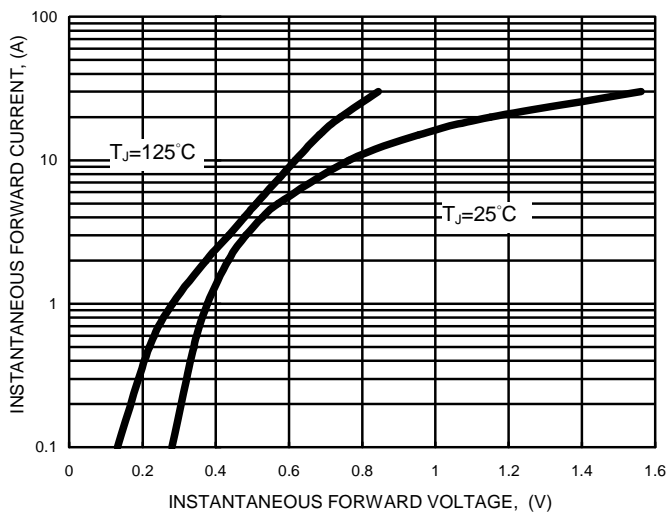


FIG.4- TYPICAL JUNCTION CAPACITANCE

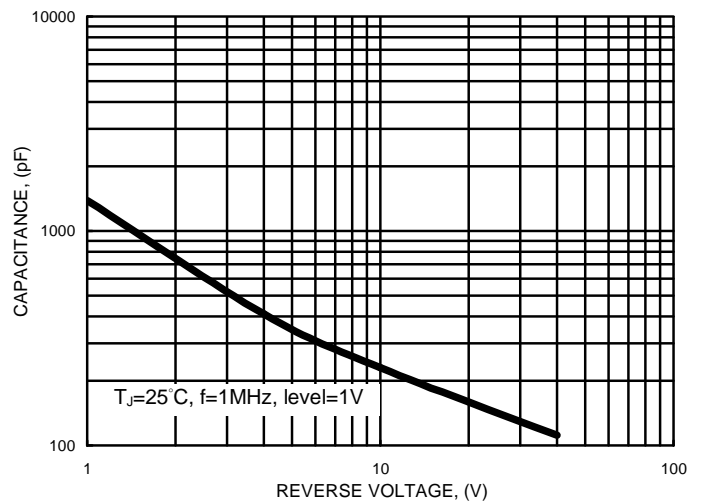
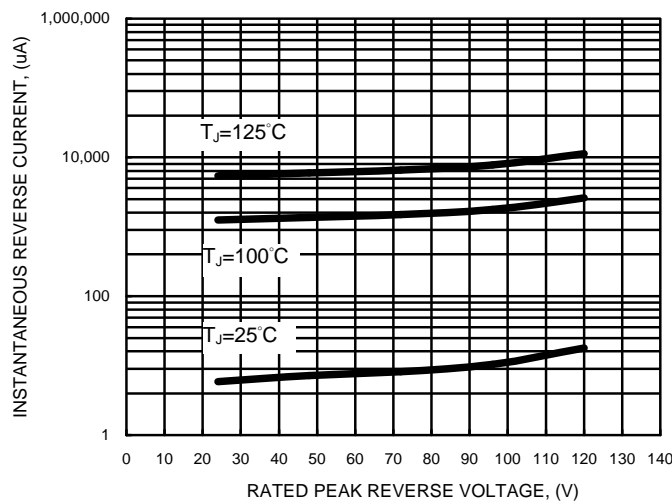


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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