LITE-ON SEMICONDUCTORS

G2045CTFW

TRENCH SCHOTTKY RECTIFIERS

REVERSE VOLTAGE – 45 Volts
FORWARD CURRENT – 20 Amperes

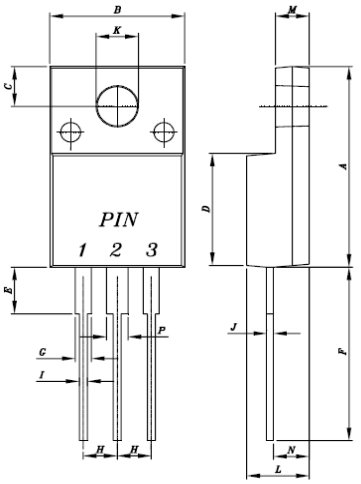
FEATURES

- Trench Schottky technology
- Low power loss, high efficiency
- Low forward drop voltage
- Qualified according to AEC-Q101 Rev_C
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

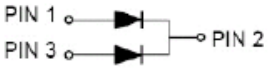
MECHANICAL DATA

- Case: ITO-220AB molded plastic
- Case Material: “Green” molding compound, UL flammability classification 94V-0,"Halogen-free".
- Terminals: Matte Tin
- Lead Free Finish, RoHS Compliant
- Polarity: As marked on the body
- Weight: 0.05 ounces, 1.558 grams (Approximate)
- Mounting position: Any

ITO-220AB(WB)



ITO-220AB(WB)		
DIM.	MIN.	MAX.
A	14.95	15.95
B	10.00	10.40
C	2.76	3.36
D	8.50	8.80
E	3.30	3.90
F	13.0	13.70
G	1.15	1.70
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
P	1.50	1.90
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}	45	V
Maximum DC Blocking Voltage	V_{DC}	45	V
Average Rectified Output Current per device @Tc=110°C	I_F	20	A
Non-repetitive Peak Forward Surge Current single half sine-wave tp=8.3ms	I_{FSM}	180	A
Operating junction and Storage temperature range	T_J, T_{STG}	-55 to +150	°C

STATIC ELECTRICAL CHARACTERISTICS

Parameter	Test condition	Symbol	Typ.	Max.	Unit
Maximum Forward Voltage Note(1)	IF=10A @Tj=25°C IF=10A @Tj=125°C	VF	- 0.45	0.5 -	V
Maximum DC Reverse Current	VR=45V @Tj=25°C @Tj=125°C	IR	- -	0.5 100	mA mA
Junction Capacitance per element	f=1MHz, VR=4V	Cj	1260	-	pF

THERMAL CHARACTERISTICS

Parameter	SYMBOL	VALUE	UNIT
Typical thermal resistance Junction (Note 2&3)	$R_{\Theta JC}$ $R_{\Theta JL}$ $R_{\Theta JA}$	3 4 15	°C/W

Note :

(1) 300us Pulse Width, 2% Duty Cycle.
(2) Thermal Resistance Junction to Case, Lead and Ambient.
(3) Device mounted on 72 x 75 x 2 mm Copper plate.

REV.-5, Sep-2019, KTHC126

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RATING AND CHARACTERISTIC CURVES
G2045CTFW

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FIG.1- FORWARD CURRENT DERATING CURVE

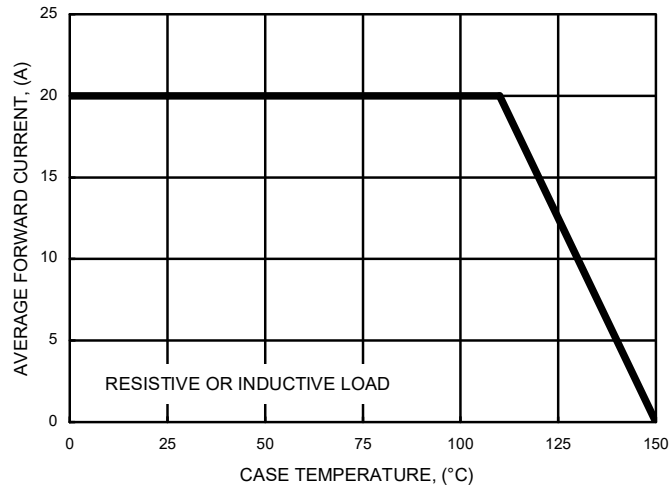


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

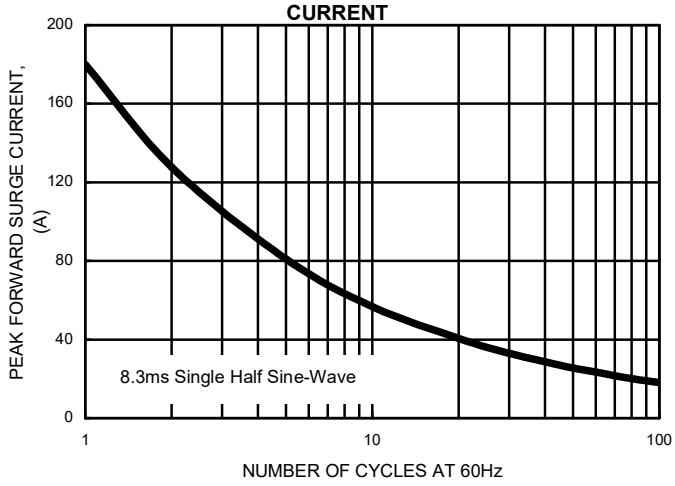


FIG.3- TYPICAL JUNCTION CAPACITANCE

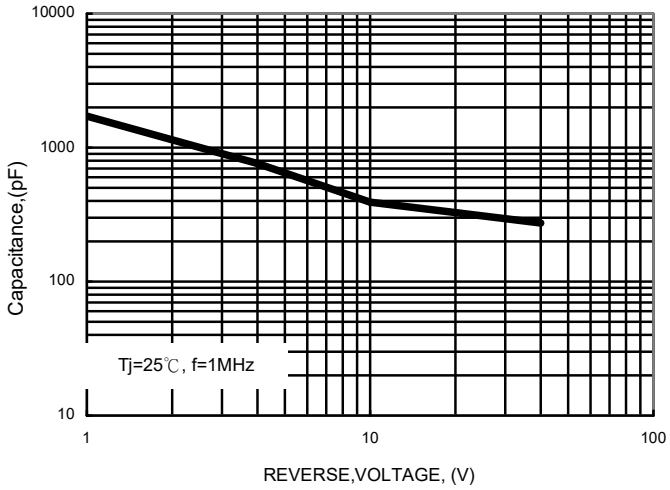


FIG.4- TYPICAL FORWARD CHARACTERISTICS

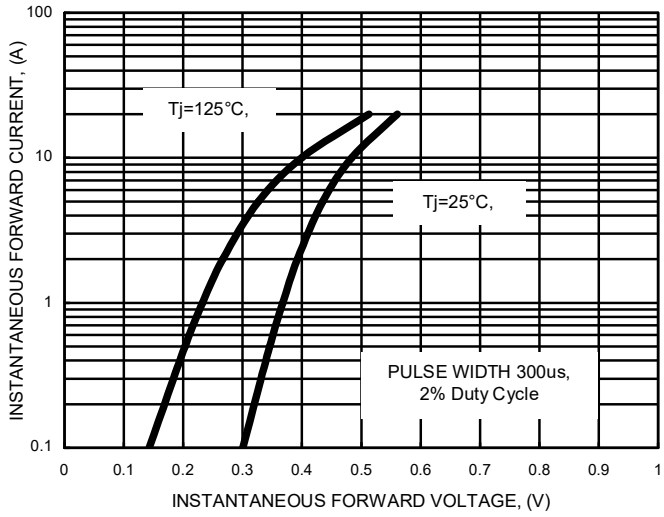
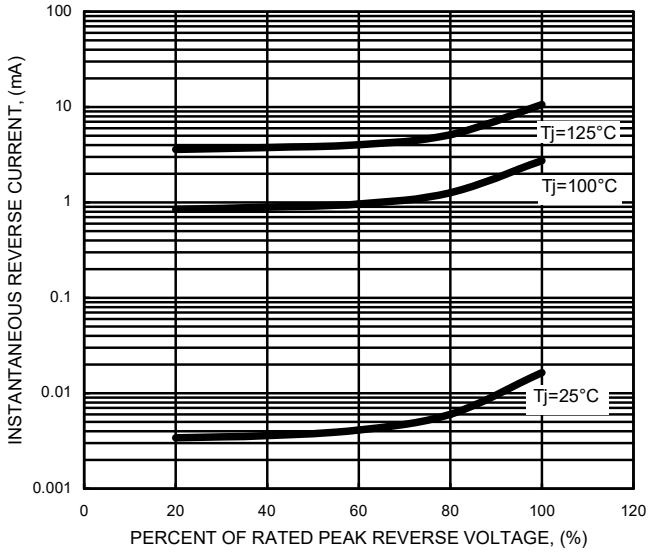


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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