

TRENCH SCHOTTKY RECTIFIER

REVERSE VOLTAGE – 100 Volts
FORWARD CURRENT – 40 Amperes

FEATURES

- High junction temperature capability
- Negligible switching losses
- Good trade off between leakage current and forward voltage drop
- Qualification is according to AEC-Q101 Rev_D

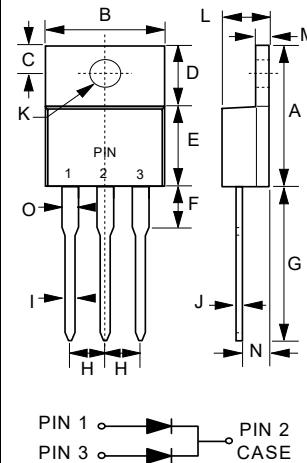
APPLICATION

- High frequency miniature switch mode of adaptors
- On-board DC-DC converters
- Use in high frequency inverters

MECHANICAL DATA

- Case: JEDEC TO-220AB
- Case Material: "Green" Molding compound, UL flammability classification 94V-0, "Halogen-free".
- Lead free finish, RoHS compliant
- Polarity : As marked on body
- Marking code: G40H100CTW
- Weight: 0.07 ounces, 1.927 grams (Approximate)

TO-220AB



TO-220AB		
DIM	MIN	MAX
A	14.40	15.20
B	9.65	10.67
C	2.54	3.43
D	5.84	6.86
E	8.26	9.28
F	-	4.20
G	12.70	14.73
H	2.29	2.79
I	0.51	1.00
J	0.30	0.64
K	3.53Φ	4.09Φ
L	3.56	4.83
M	1.14	1.40
N	2.03	2.92
O	1.14	1.37

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}	100	V
Maximum DC blocking voltage	V_{DC}	100	V
Maximum Average rectified forward current	I_{AV}	40	A
Non repetitive peak reverse current	I_{RSM}	3	
Peak forward surge 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	250	A
Operating and Storage temperature range	T_J, T_{STG}	-55 ~ +175	°C

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION	SYMBOL	TYP	MAX	UNIT
Forward voltage (Note 1)	$I_F = 20A$	$T_J = 25^\circ C$ $T_J = 125^\circ C$	--	0.79	V
			0.64	--	
Reverse leakage current	$V_R = 100V$	$T_J = 25^\circ C$ $T_J = 125^\circ C$	--	10	uA
			1.2	10	
Typical junction capacitance (Note 2)		C_J	1360		pF

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP	UNIT
Typical thermal resistance (Note 3,4)	R_{thJL}	1	°C/W
	R_{thJc}	2	

Note :

- (1) 300us pulse width, 2% duty cycle
- (2) Measured at 1.0MHz and applied reverse voltage of 4.0 VDC
- (3) Thermal Resistance test performed in accordance with JESD-51.
- (4) The unit mounted on Copper heatsink (100mm x 100mm x 2mm)

REV-2, Nov.-2019, KTHC205

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RATING AND CHARACTERISTIC CURVES G40H100CTW



FIG.1- FORWARD CURRENT DERATING CURVE

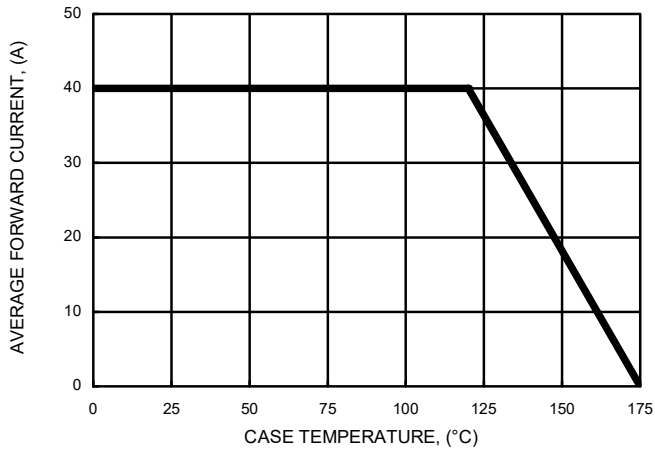


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

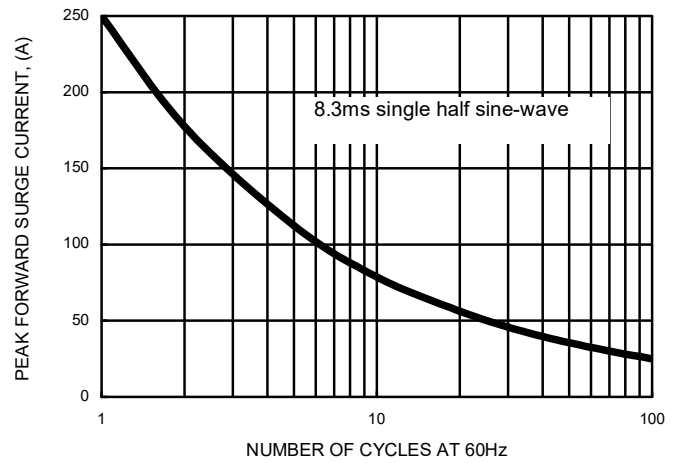


FIG.3- TYPICAL FORWARD CHARACTERISTICS

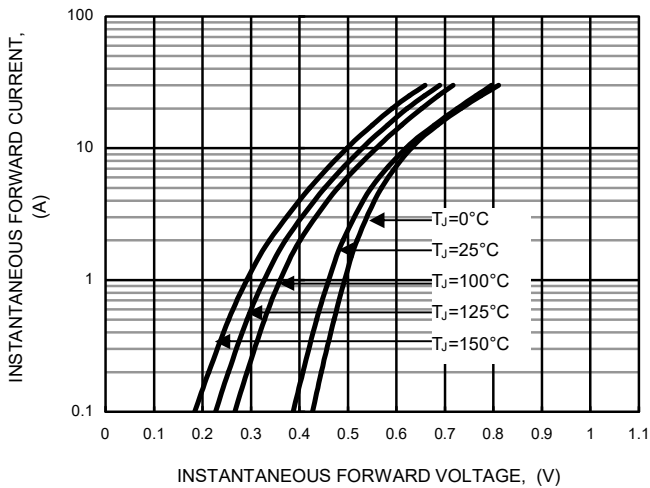


FIG.4- TYPICAL JUNCTION CAPACITANCE

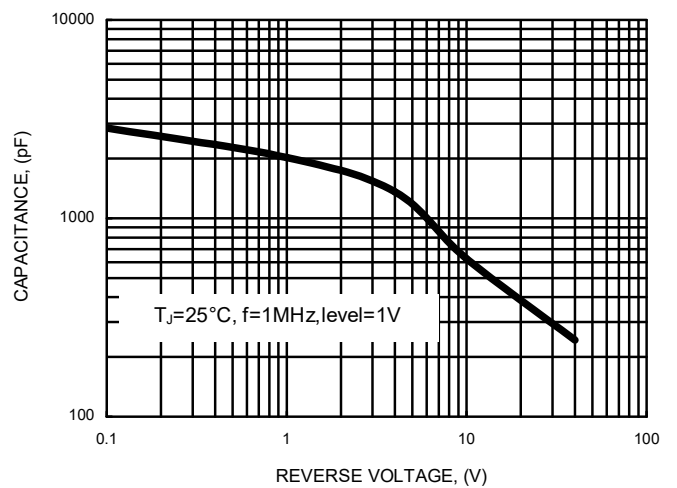


FIG.5- TYPICAL REVERSE CHARACTERISTICS

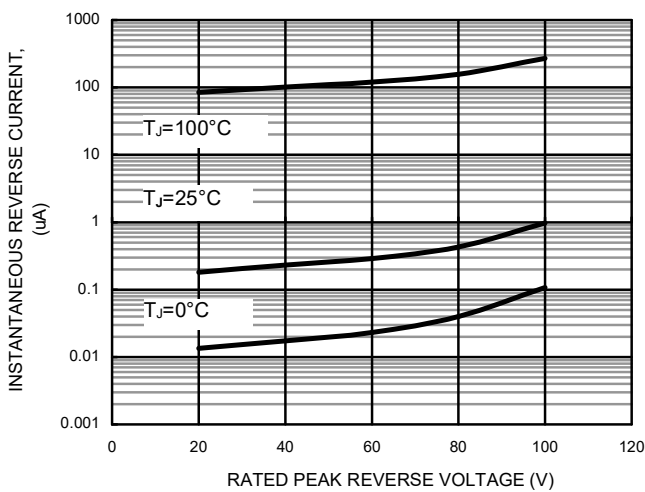
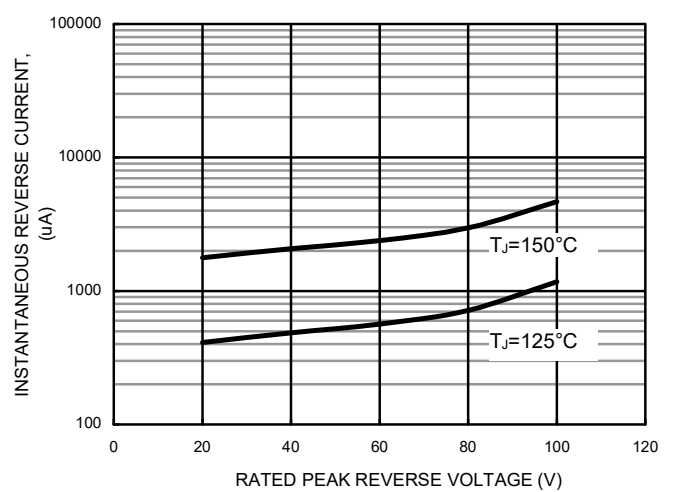
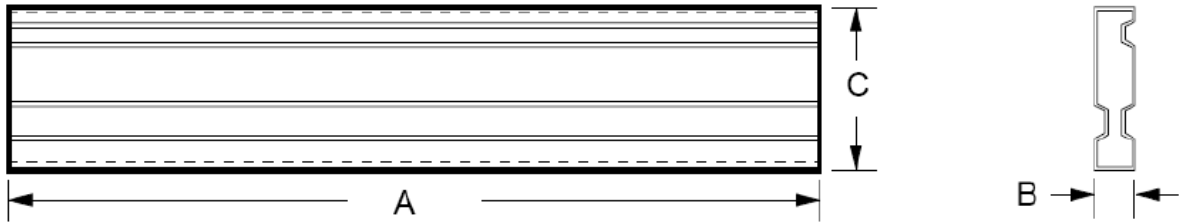


FIG.6- TYPICAL REVERSE CHARACTERISTICS

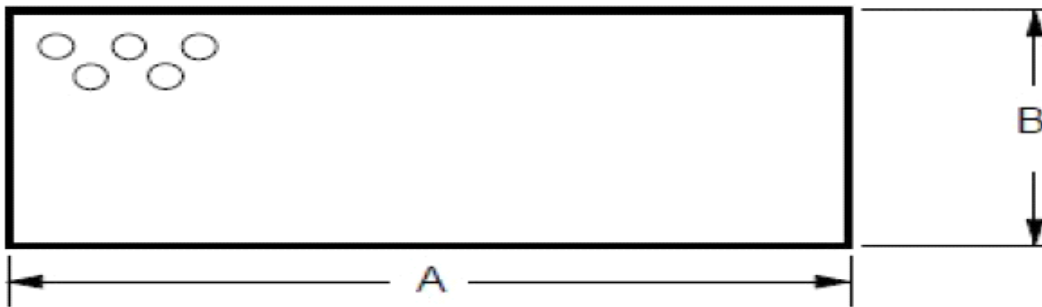


Packaging Information:

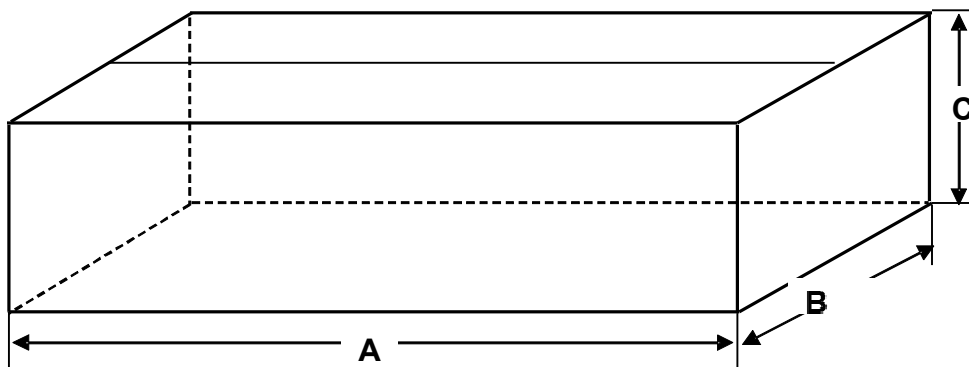
1. TUBE



2. AIR BAG

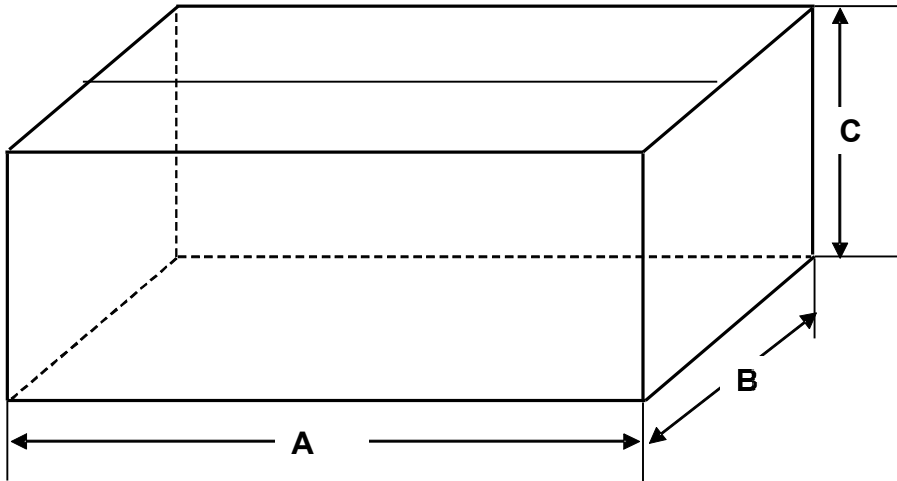


3. INNERBOX



Packaging Information:

4. CARTON



Unit:mm

P/N	DIMENSION "A"	DIMENSION "B"	DIMENSION "C"	Q'ty/per	REMARK
TUBE	536	5.6	31.8	50	/
AIR BAG	800	550	/	/	/
INNERBOX	555	165	105	2000	40TUBE
CARTON	575	179	225	4K	2 INNER BOX

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