

TRENCH SCHOTTKY RECTIFIERS

REVERSE VOLTAGE – 60 Volts
FORWARD CURRENT – 20 Amperes

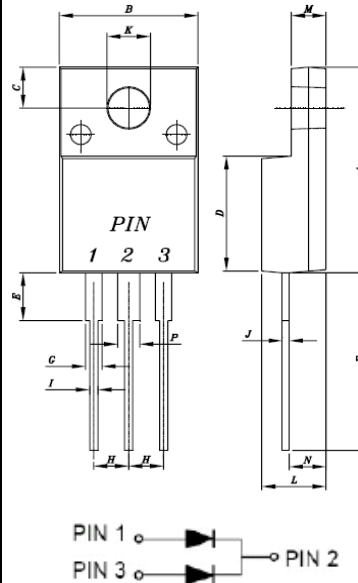
FEATURES

- 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
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. “Green” Device (Note 3)**

MECHANICAL DATA

- Package: ITO-220AB molded plastic
- Package Material: “Green” molding compound, UL flammability classification 94V-0, “Halogen-free”.
- Terminals: Matte Tin
- Polarity: As marked on the body
- Weight: 0.055 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}	60	V
Maximum DC Blocking Voltage	V _{DC}	60	V
Average Rectified Output Current per Device @T _c =105°C	I _F	20	A
Non-Repetitive Peak Forward Surge Current Single Half Sine-Wave tp=8.3ms	I _{FSM}	200	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 4)	I _F =10A @T _j =25°C	V _F	0.50	0.57	V
	I _F =10A @T _j =125°C		0.47	0.52	
Maximum DC Reverse Current	V _R =60V @T _j =25°C @T _j =125°C	I _R	-	0.25	mA
Junction Capacitance per Element	f=1MHz, V _R =4V	C _J	760	-	pF

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	VALUE	UNIT
Typical thermal resistance Junction (Notes 5, 6)	R _{θJC}	3.5	°C/W
	R _{θJL}	4.5	
	R _{θJA}	15	

Notes:

- EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
- See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
- Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
- 300us Pulse Width, 2% Duty Cycle.
- Thermal Resistance Junction to Case, Lead and Ambient.
- Device mounted on 100 x 100 x 2 mm Copper plate.

RATING AND CHARACTERISTIC CURVES

G2060CTFW

FIG.1- FORWARD CURRENT DERATING CURVE

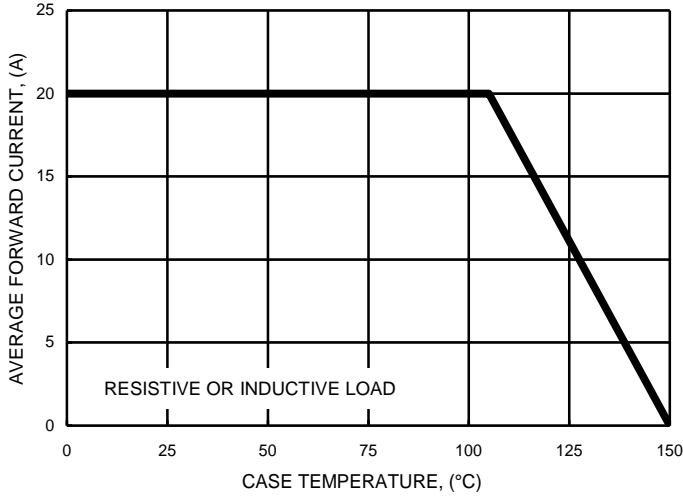


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

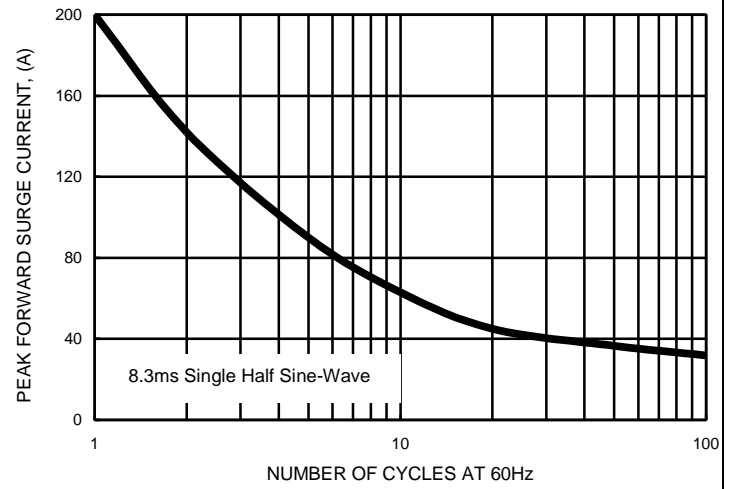


FIG.3- TYPICAL JUNCTION CAPACITANCE

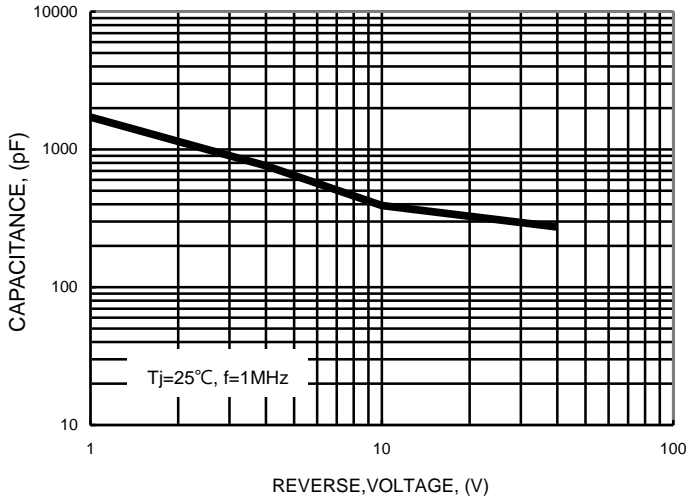


FIG.4- TYPICAL FORWARD CHARACTERISTICS

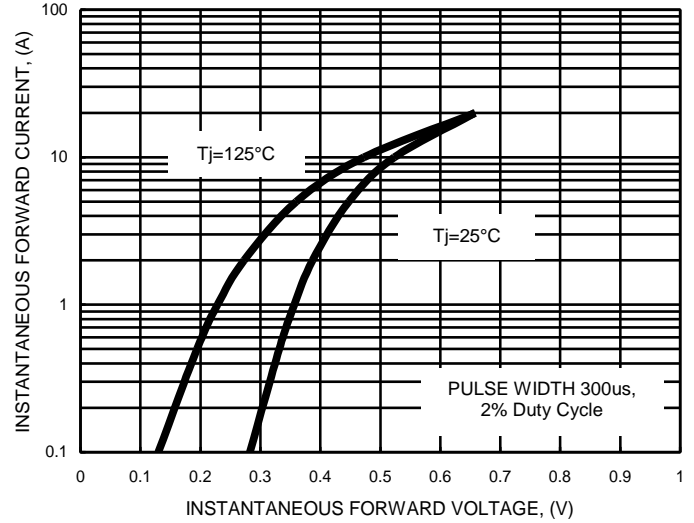
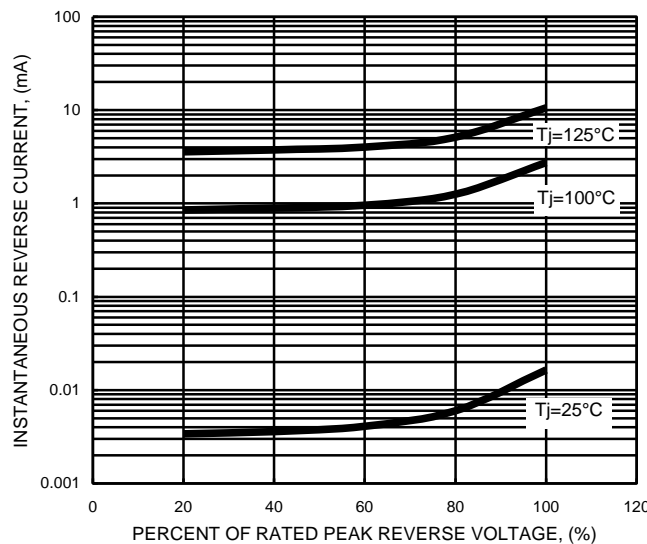


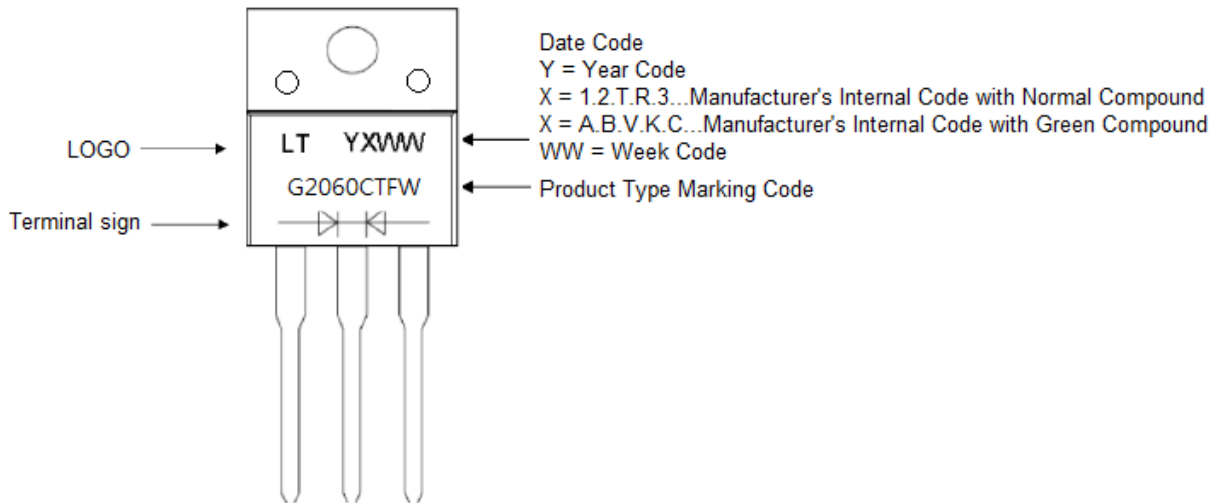
FIG.5- TYPICAL REVERSE CHARACTERISTICS



Ordering Information:

Part Number	Package	Packing	
		Qty.	Carrier
G2060CTFW	ITO-220AB(WB)	50 pcs	Tube

Marking Information:



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