

TRENCH SCHOTTKY RECTIFIER

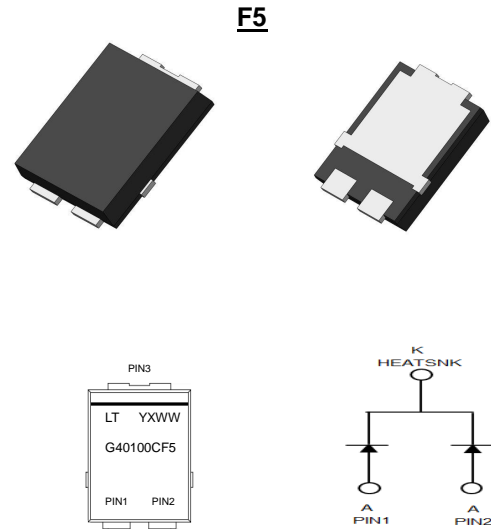
REVERSE VOLTAGE – 100 Volts
FORWARD CURRENT – 40 Amperes

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 application

MECHANICAL DATA

- Case: F5-PAK molded plastic
- Case Material: "Green" Molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl.) "Halogen-free".
- Moisture Sensitivity: Level1 per J-STD-020C
- Lead free finish, RoHS compliant
- Marking code: G40100CF5
- Weight: 0.989 grams (Approximate)



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
	@ $T_c = 90^\circ C$		
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 ~ +150	°C

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION	SYMBOL	TYP	MAX	UNIT
Forward voltage (Note 1)	$I_F = 10A$	V_F	$T_J = 25^\circ C$ 0.55	--	V
	$T_J = 125^\circ C$ 0.50		--		
Reverse leakage current	$V_R = 100V$	I_R	$T_J = 25^\circ C$ --	400	uA
			$T_J = 125^\circ C$ --	35	mA

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP	UNIT
Typical thermal resistance (Note 2)	R_{thJc}	2	°C/W

Note :

- (1) 300us Pulse Width, 2% Duty Cycle.
- (2) Thermal Resistance test performed in accordance with JESD-51.

REV. 0, Aug.-2015, KSHB31

RATING AND CHARACTERISTIC CURVES
G40100CF5



FIG.1- FORWARD CURRENT DERATING CURVE

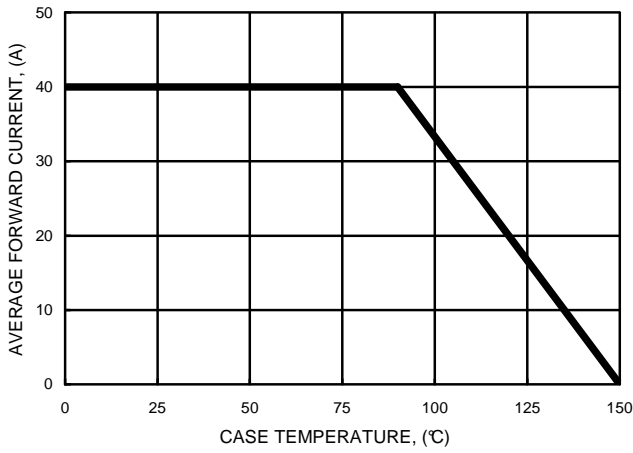


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

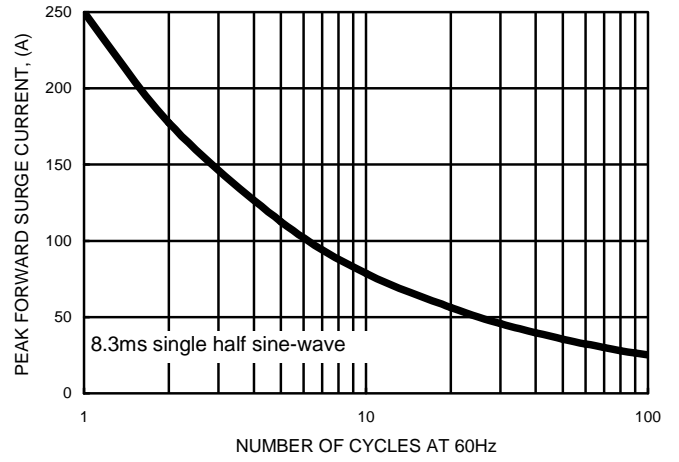


FIG.3- TYPICAL FORWARD CHARACTERISTICS

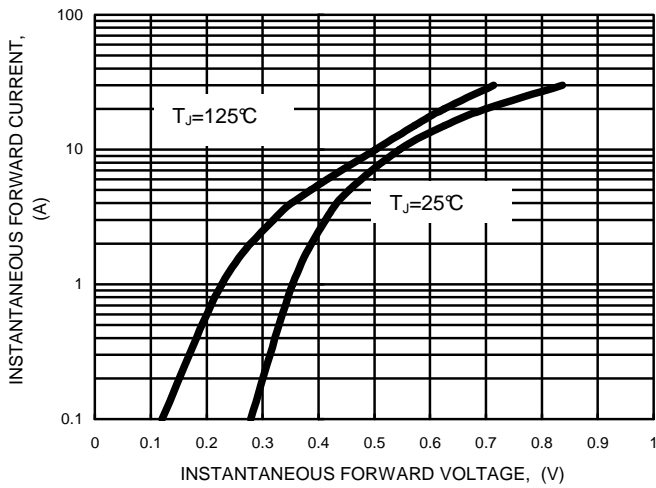
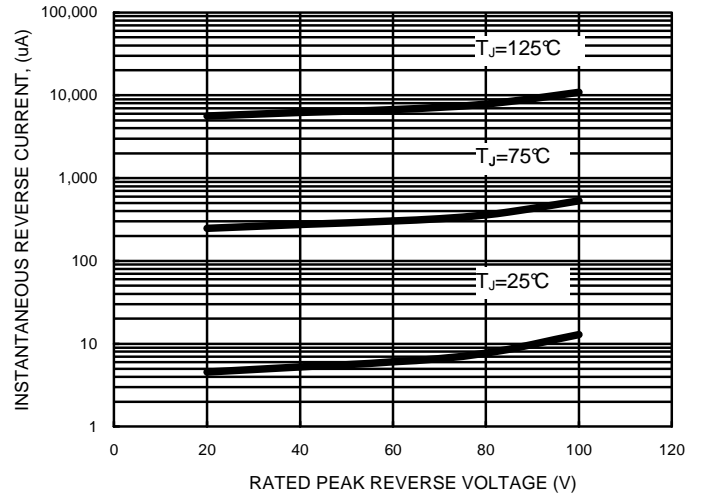


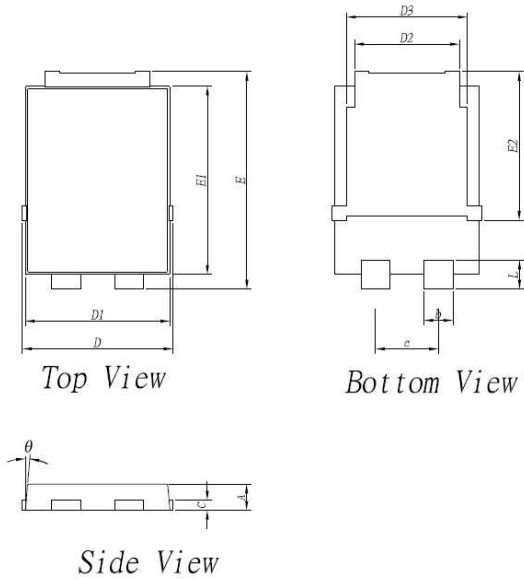
FIG.4- TYPICAL REVERSE CHARACTERISTICS



MECHANICAL AND MARKING INFORMATION
G40100CF5

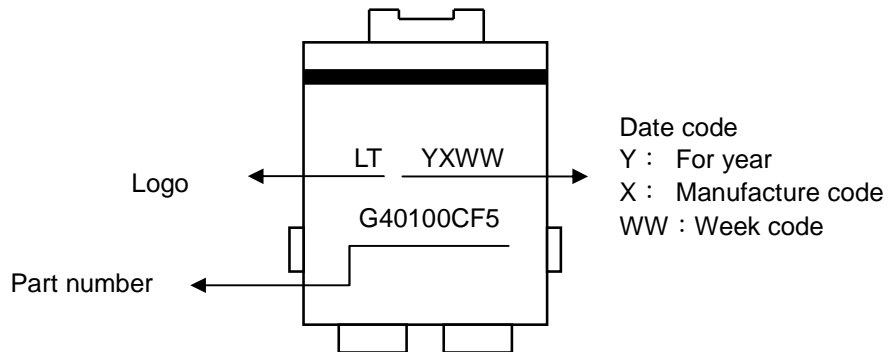


Package Dimension :



F5			
DIM.	MIN.	TYP.	MAX
A	1.60	1.80	2.00
b	1.80	2.00	2.30
C	--	0.70	--
D	--	10.40	--
D1	9.80	10.00	10.30
D2	7.00	7.25	7.50
D3	8.10	8.35	8.60
E	14.50	15.00	15.50
E1	12.70	13.00	13.30
E2	10.00	10.25	10.60
e	4.35 REF.		
L	1.70	2.00	2.30
θ	--	--	5°
All dimension in millimeter			

Marking Information :



Packaging Information :

DEVICE	Q'TY/REEL (PCS)	REEL DIA. (INCH)	Q'TY/BOX (PCS)	Q'TY/CARTON (PCS)
G40100CF5	1500	13	1500	10.5K

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