LITE-ON SEMICONDUCTOR

FB330E

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

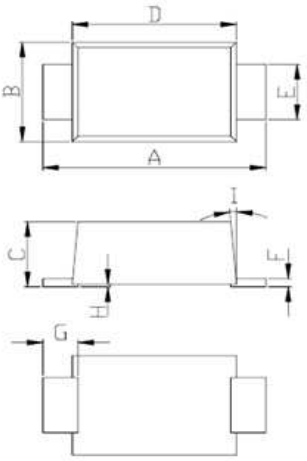
REVERSE VOLTAGE – 30 Volts
FORWARD CURRENT – 3 Amperes

FEATURES
- Very low profile package
- High efficiency
- Negligible switching losses
- Low forward voltage drop, low power loss
- Qualification is according to AEC-Q101 Rev_C

APPLICATION
- Low voltage high frequency inverters
- DC to DC converter
- Polarity protection application

MECHANICAL DATA
- Case: JEDEC DO-219AA
- Case Material: “Green” molding compound, UL Flammability classification 94V-0,(No Br. SB. Cl.) “Halogen-free”.
- Moisture Sensitivity: Level 1 per J-STD-020
- Lead free finish, RoHS compliant
- Weight: 16.3 mg (Approximate)
- Marking code: 330

F1A



F1A			
DIM	MIN	TYP	MAX
A	3.50	3.80	3.90
B	1.70	1.90	2.00
C	0.81	1.18	1.20
D	2.70	2.80	2.90
E	0.80	1.00	1.35
F	0.05	0.15	0.30
G	0.35	0.60	0.85
H	0.03	0.07	0.1
I	0°	5°	8°
All dimension in millimeter			

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwis e specified.

ABSOLUTE RATINGS

PARAMETER		SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage		V_{RRM}	30	V
Maximum DC blocking voltage		V_{DC}	30	V
Maximum Average rectified output current	@T_C=110℃	$I_{(AV)}$	3	A
Peak forward surge current 8.3ms single half sine-wave Superimposed on rated load.		I_{FSM}	70	A
Operating junction and Storage Temperature range		T_J, T_{STG}	-55 ~ +150	℃

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITIONS		SYMBOL	TYP	MAX	UNIT
Forward voltage (Note 1)	I_F=3A	T_J=25℃ T_J=125℃	V_F	-- 0.48	0.595 --	V
Leakage current	V_R=30V	T_J=25℃ T_J=125℃	I_R	-- 1.25	25 5	uA mA
Typical junction capacitance (Note 2)			C_J	165		pF

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP	UNIT
Typical thermal resistance (Note 3)	$RthJ_A$ $RthJ_C$ $RthJ_L$	80 25 35	℃/W

Note :

(1) 300us pulse width, 2% duty cycle.
(2) Measured at 1.0MHz and applied voltage of 4.0VDC.
(3) Thermal resistance test performed in accordance with JESD-51.

REV.-1 , Sep-2016, KSHP43

RATING AND CHARACTERISTIC CURVES
FB330E

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FIG.1 FORWARD CURRENT DERATING CURVE

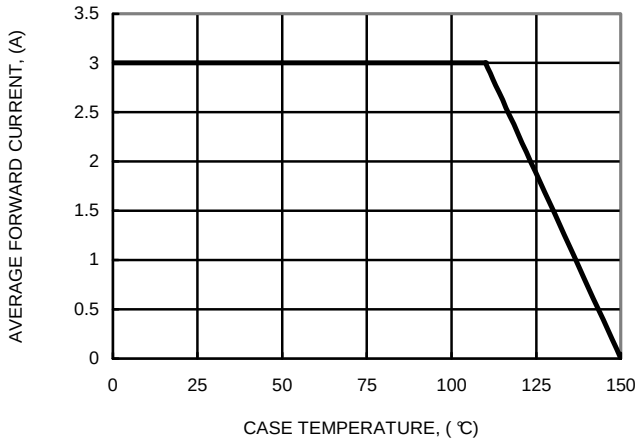


FIG.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

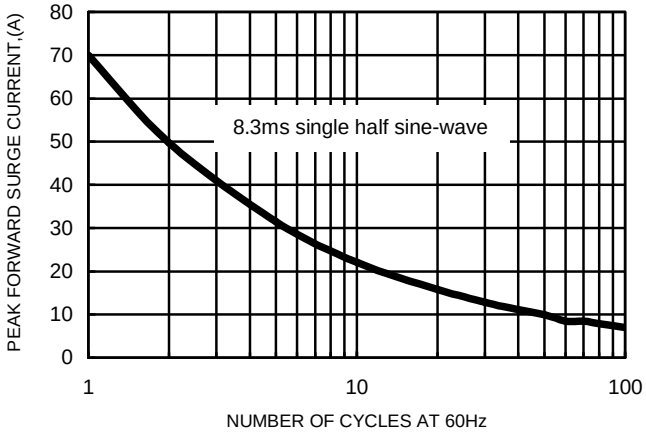


FIG.3 TYPICAL FORWARD CHARACTERISTICS

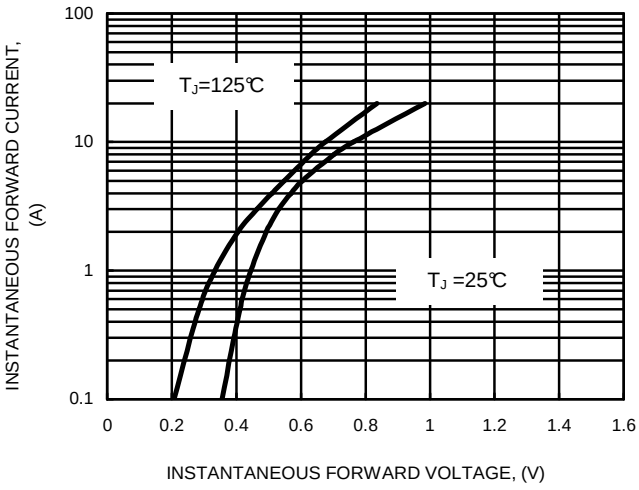


FIG.4 TYPICAL JUNCTION CAPACITANCE

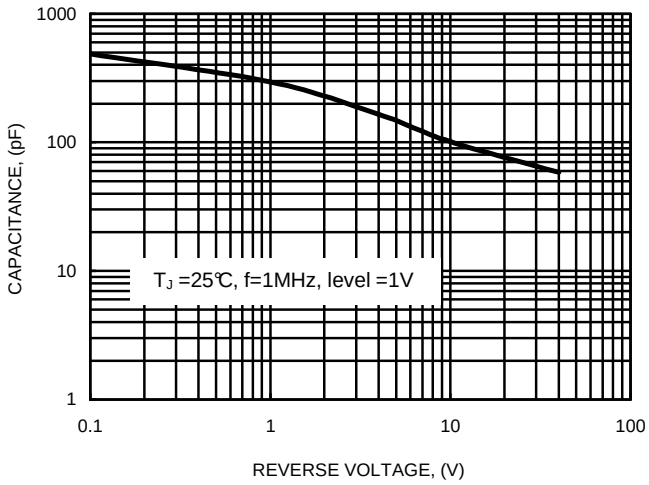
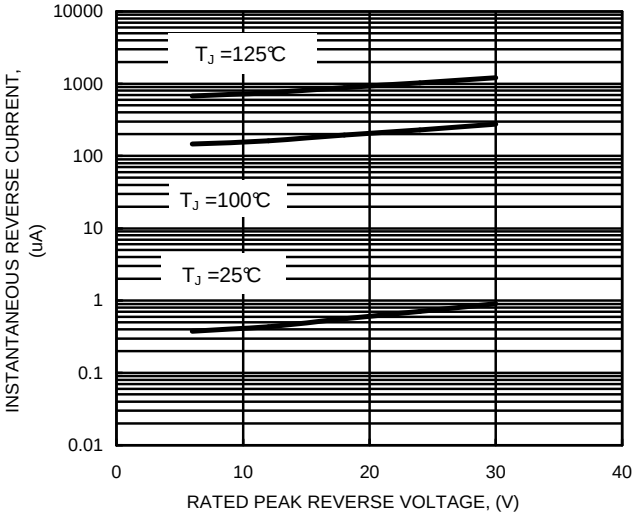


FIG.5 TYPICAL REVERSE CHARACTERISTICS



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