LITE-ON SEMICONDUCTOR

FB230H

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

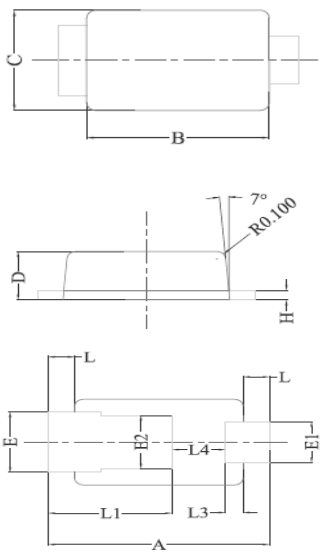
REVERSE VOLTAGE – 30 Volts
FORWARD CURRENT – 2 Amperes

FEATURES
- Ultra-Small Surface Mount Package
- Qualification is according to AEC-Q101 Rev_C

APPLICATION
- DC to DC converter
- Polarity protection application
- Freewheeling diodes

MECHANICAL DATA
- Case: SOD-323EP Plastic
- 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: 0.005 grams (Approximate)
- Marking code: B2E

SOD-323EP



SOD-323EP		
DIM	MIN	MAX
A	2.40	2.60
B	1.85	1.95
C	1.20	1.30
D	0.60	0.70
E	0.78	0.98
E1	0.50	0.70
E2	0.60	1.00
H	0.08	0.18
L	0.20	0.40
L1	1.40(TYP)	
L3	0.20(TYP)	
L4	0.40	0.80
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=95℃	$I_{(AV)}$	2	A
Peak forward surge current 8.3ms single half sine-wave Superimposed on rated load.		I_{FSM}	25	A
Operating junction and Storage Temperature range		T_J, T_{STG}	-55 ~ +125	℃

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITIONS		SYMBOL	MAX	UNIT
Forward voltage (Note1)	I_F=2A	T_J=25℃ T_J=125℃	V_F	0.60 0.55	V
Leakage current	V_R=30V	T_J=25℃ T_J=125℃	I_R	60 40	uA mA
Typical junction capacitance (Note 2)			C_J	1160	pF

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP	UNIT
Typical thermal resistance (Note 3,4)	$RthJ_A$ $RthJ_C$ $RthJ_L$	100 25 50	℃/W

Note :

REV.1 , Oct -2016, KSHR06

(1) 300us pulse width, 2% duty cycle.
(2) Measured at 1.0MHz and applied voltage of 4.0V DC.
(3) Thermal resistance test performed in accordance with JESD-51.
(4) The Unit mounted on Aluminum substrate PC board.(9.89mm x 9.74mm x 1.49mm)

RATING AND CHARACTERISTIC CURVES
FB230H

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FIG.1 FORWARD CURRENT DERATING CURVE

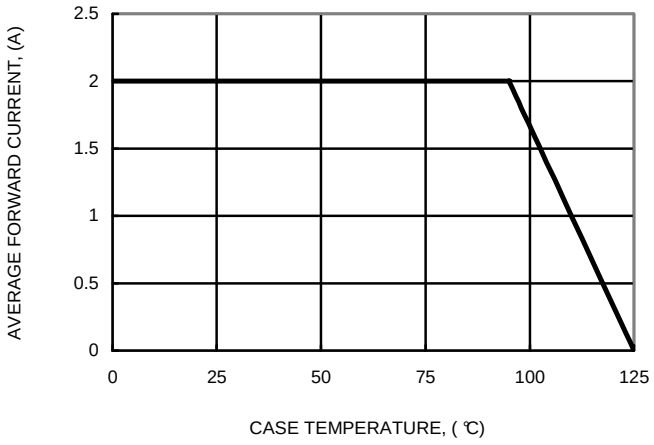


FIG.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

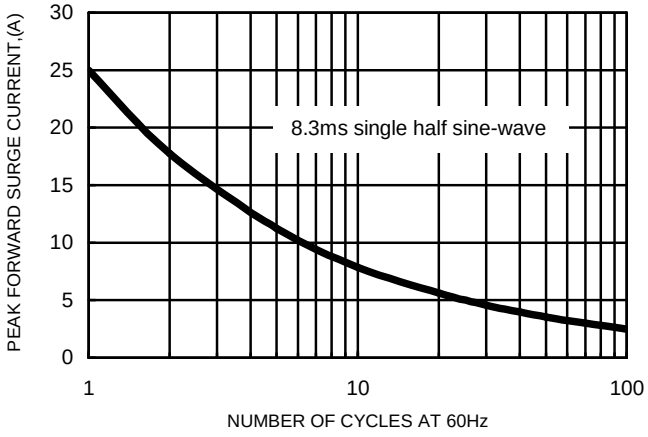


FIG.3 TYPICAL FORWARD CHARACTERISTICS

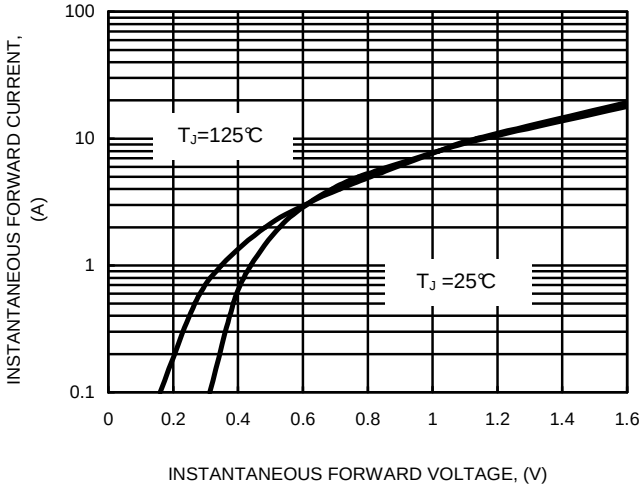


FIG.4 TYPICAL JUNCTION CAPACITANCE

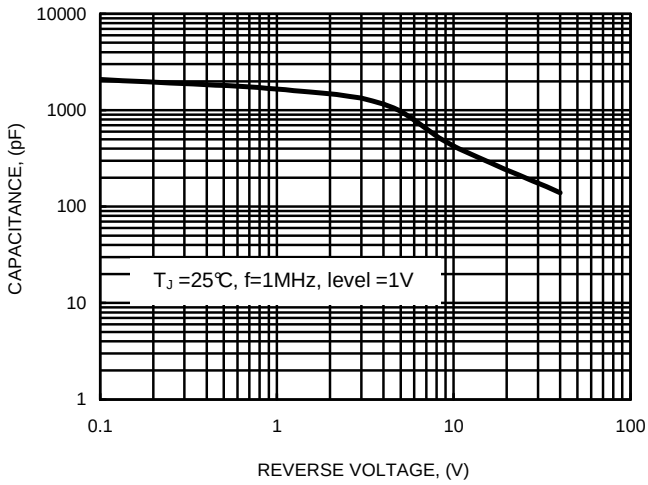
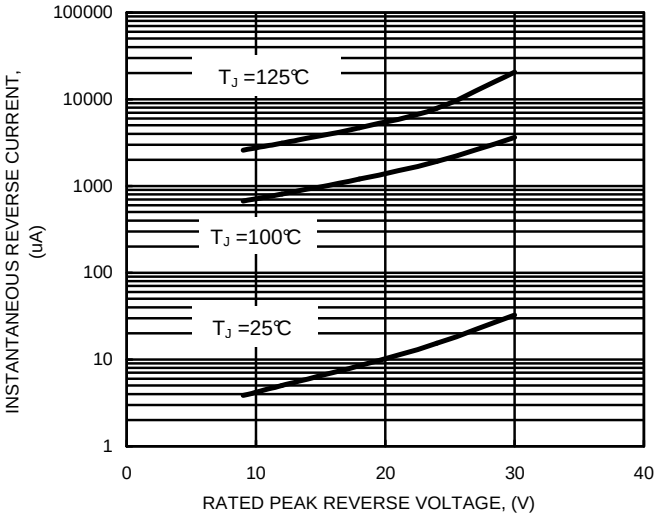


FIG.5 TYPICAL REVERSE CHARACTERISTICS



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