LITE-ON SEMICONDUCTORS

FB320LA thru 340LA

SURFACE MOUNT
SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE – 20 to 40 Volts
FORWARD CURRENT – 3.0 Ampere

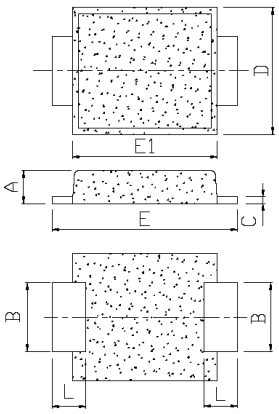
FEATURES

- Very low profile package – 0.98mm
- High efficiency
- Low forward voltage drop, low power loss
- Qualified according to AEC-Q101 Rev_C
- For use in low voltage, high frequency inverters, free wheeling, dc-to-dc converters and polarity protection applications

MECHANICAL DATA

- Case: JEDEC DO-221AC
- Case Material: "Green" molding compound, UL flammability classification 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Lead Free Plating (Matte Tin Finish.)
- Component in accordance to RoHs 2002/95/EC

SMA Flat



SMA Flat		
DIM.	MIN.	MAX.
A	0.90	1.10
B	1.25	1.65
C	0.15	0.40
D	2.25	2.95
E	4.80	5.60
E1	3.95	4.60
L	0.75	1.50
All dimension in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	FB320LA	FB330LA	FB340LA	UNIT
Device marking code	Note	B3D	B3E	B3G	---
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Average Rectified Output Current @T_L=105°C,(Fig.1)	$I_{(AV)}$	3.0			A
Peak Forward Surge Current 8.3ms single half sine-wave	I_{FSM}	50			A
Forward Voltage (1) IF=3.0A @Tj=25°C @Tj=100°C	V_F	0.40 0.37			V
Leakage Current (1) VDC=Rated @Tj=25°C @Tj=100°C	I_R	0.5 45			mA
Typical junction capacitance (2)	C_J	370			pF
Operating junction temperature	T_J	-55 to +125			°C
Storage temperature range	T_{STG}	-55 to +150			°C
THERMAL CHARACTERISTIC	**SYMBOL**	**Typical**			**UNIT**
Typical thermal resistance_Junction to Case (3)	$R_{\Theta JC}$	25			°C/W
Typical thermal resistance_Junction to Ambient(3)	$R_{\Theta JA}$	65			°C/W
Typical thermal resistance_Junction to Lead (3)	$R_{\Theta JL}$	17			°C/W

REV. -3 ,Sep-2019, KSHP09

Note :

(1) 300us Pulse width, 2% Duty cycle.
(2) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
(3) Thermal Resistance test performed in accordance with JESD-51. Unit mounted on glass-epoxy substrate with 1oz/ft²_7x5 mm copper pad.

RATING AND CHARACTERISTIC CURVES
FB320~340LA

FIG.1- FORWARD CURRENT DERATING CURVE

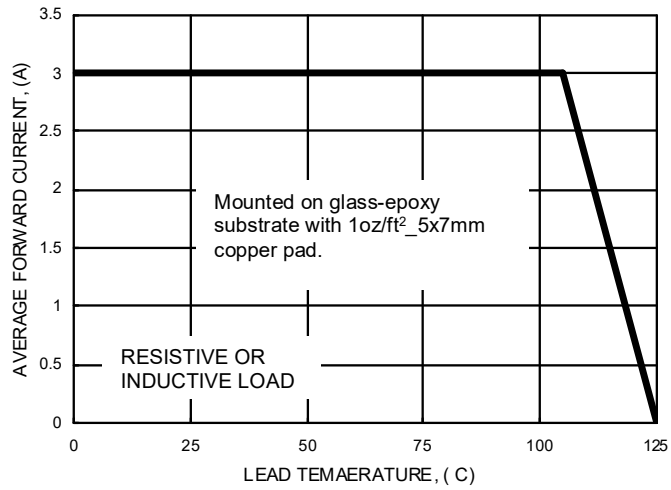


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

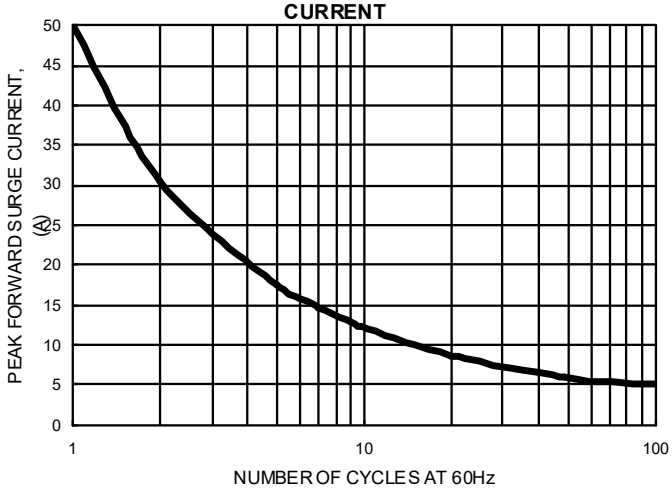


FIG.3- TYPICAL FORWORD CHARACTERISTICS

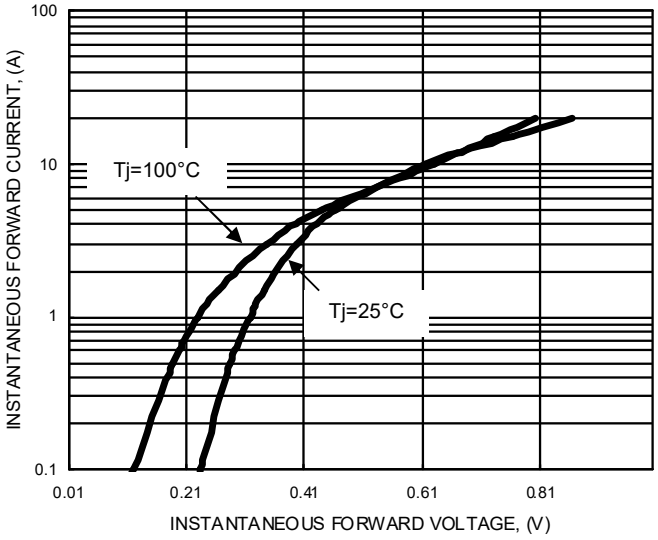


FIG.4- TYPICAL JUNCTION CAPACITANCE

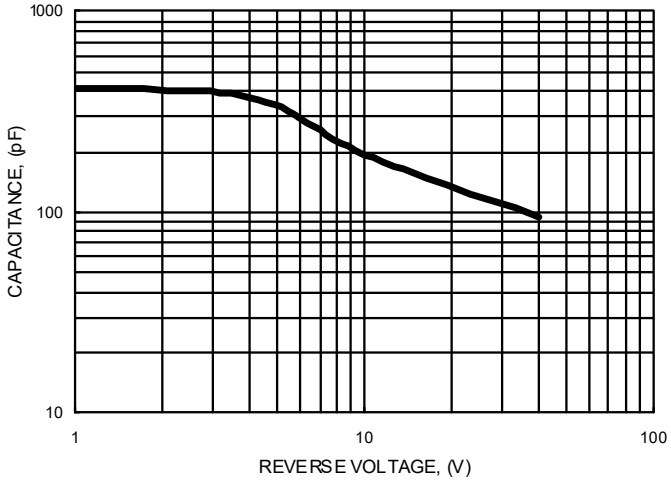


FIG.5- TYPICAL REVERSE CHARACTERISTICS

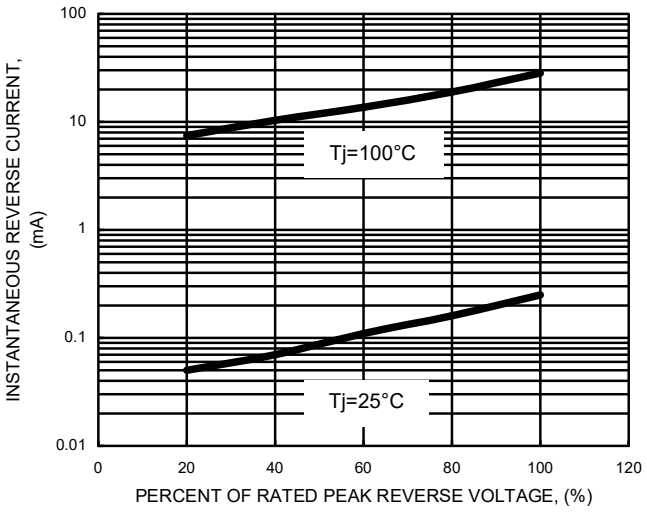
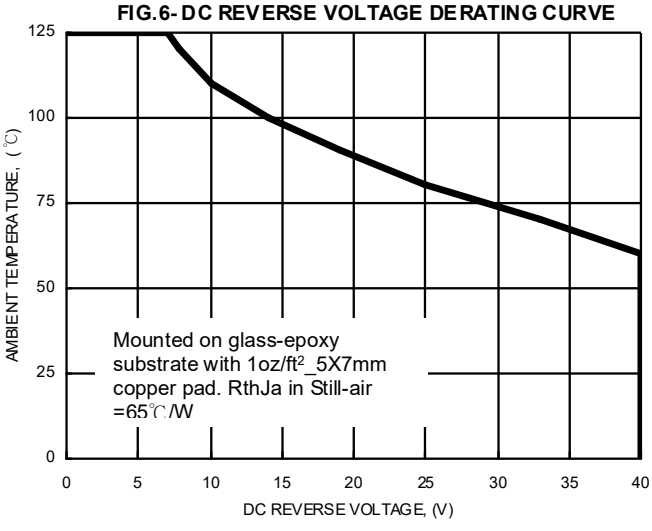


FIG.6- DC REVERSE VOLTAGE DERATING CURVE



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