

FB240LM

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE – 40 Volts
FORWARD CURRENT – 2.0 Amperes

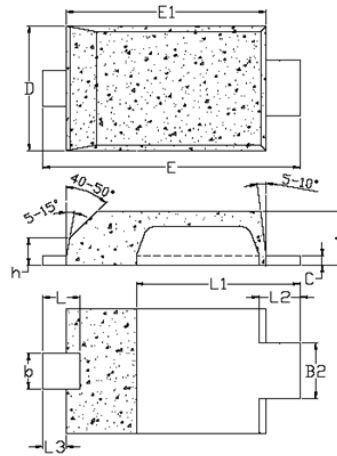
FEATURES

- Very low profile package – 0.80mm
- Super fast switching for high efficiency
- For surface mounted applications
- Very Low forward voltage drop and high current capability
- Low reverse leakage current
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. “Green” Device (Note 3)**

MECHANICAL DATA

- Case: JEDEC DO-222AA
- Case Material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl.)
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Lead Free Plating (Matte Tin Finish.)
- Component in accordance to RoHs 2002/95/EC

Mite Flat (DO-222AA)



DO-222AA		
DIM.	MIN.	MAX.
A	0.80	0.95
b	0.40	0.65
b2	0.70	1.00
C	0.10	0.25
D	1.75	2.05
E	3.60	3.90
E1	2.80	3.10
h	0.35	0.50
L	0.50	0.80
L1	2.10	2.60
L2	0.45	0.75
L3	0.20	0.50

All dimension in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	FB240LM	UNIT
Device marking code	Note	B2G	---
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Maximum Average Forward Rectified Current @ $T_C=110^\circ\text{C}$	I_{AV}	2.0	A
Peak Forward Surge 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50	A
Maximum Forward Voltage at 2A DC	V_F	0.44	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_j=25^\circ\text{C}$ @ $T_j=100^\circ\text{C}$	I_R	200 15	μA mA
Typical Junction Capacitance (Note 4)	C_T	160	pF
Typical Thermal Resistance (Note 5, 6)	$R_{\theta JC}$ $R_{\theta JL}$ $R_{\theta JA}$	22 44 100	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_j	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

Note :

- (1) EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
- (2) 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.
- (3) Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
- (4) Measured at 1.0MHz and applied reverse voltage of 4.0V DC...
- (5) Thermal Resistance test performed in accordance with JESD-51. Unit mounted on 0.75t glass-epoxy substrate with 5x7mm copper pad. $R_{\theta JL}$ is measured at the lead of cathode band, $R_{\theta JC}$ is measured at the top centre of body.
- (6) Thermal resistance to Case, Lead and Ambient.

REV.2, Oct. 2021, KSHP17

RATING AND CHARACTERISTIC CURVES
FB240LM

FIG.1- FORWARD CURRENT DERATING CURVE

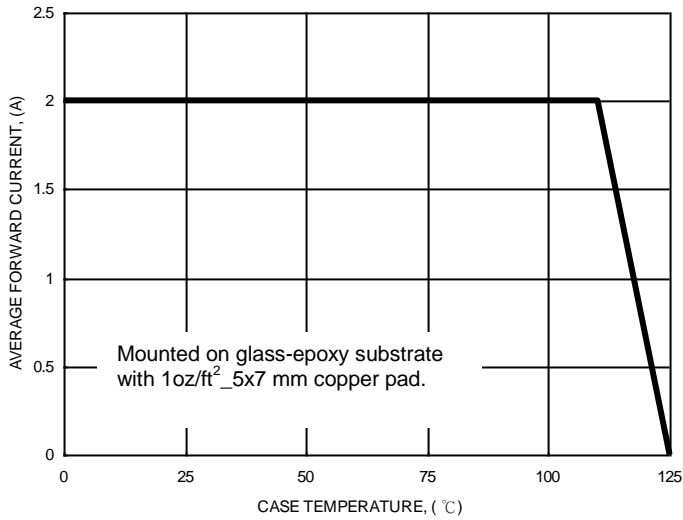


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

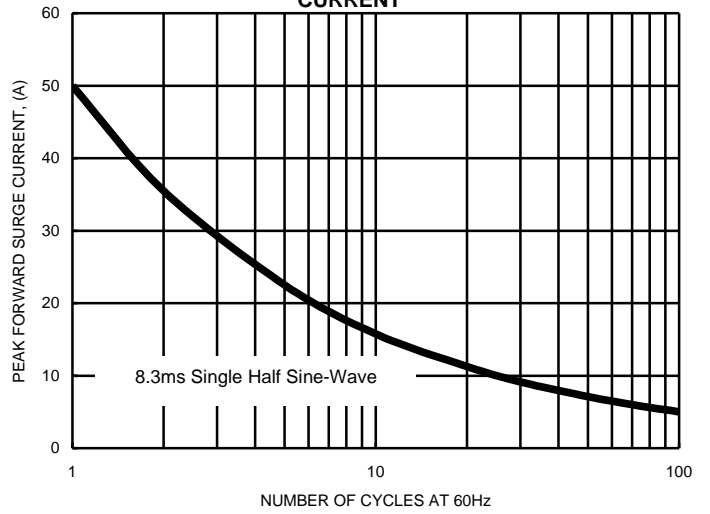


FIG.3- TYPICAL JUNCTION CAPACITANCE

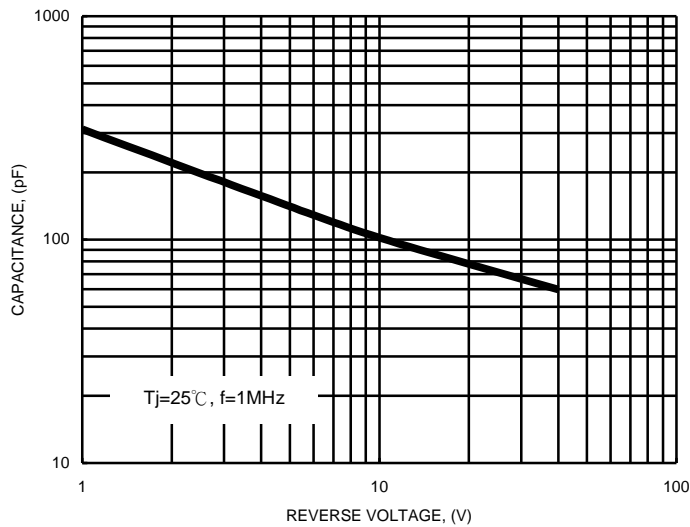


FIG.4- TYPICAL FORWARD CHARACTERISTICS

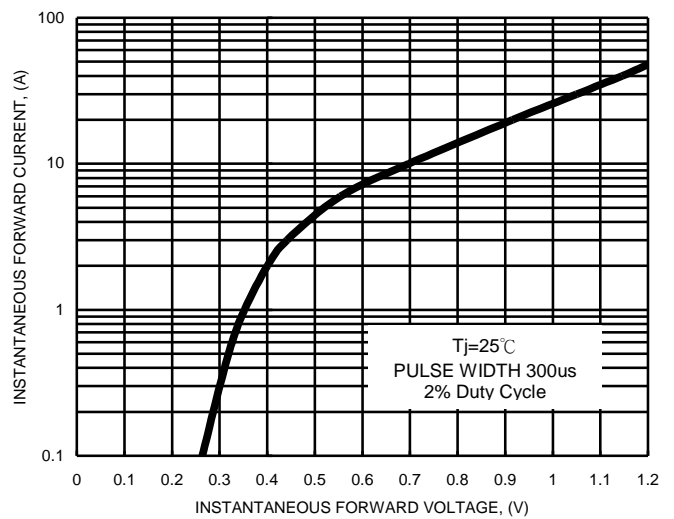
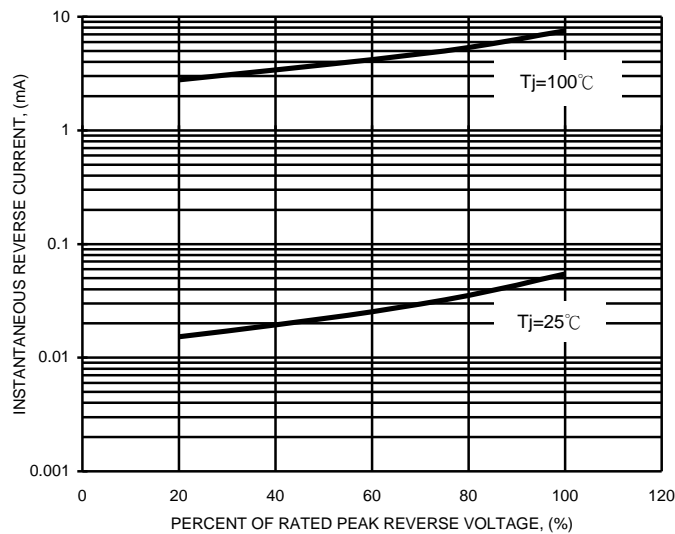


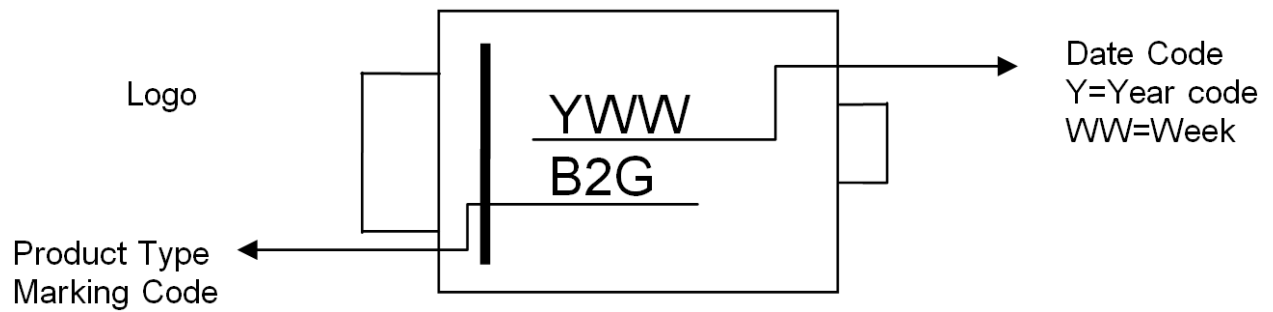
FIG.5- TYPICAL REVERSE CHARACTERISTICS



Ordering Information :

Part Number	Package	Packing	
		Qty.	Carrier
FB240LM	DO-222AA	12000	Tape & Reel

Marking Information :



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