

**SURFACE MOUNT  
SCHOTTKY BARRIER RECTIFIER**

**REVERSE VOLTAGE – 40 Volts  
FORWARD CURRENT – 3.0 Ampere**

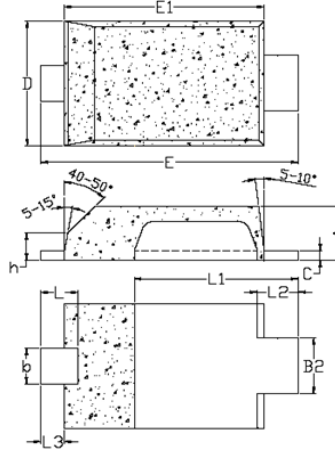
**FEATURES**

- 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
- Qualified according to AEC-Q101 Rev\_C
- **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
- 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.

PARAMETER	SYMBOL	FB340LM	UNIT
Device marking code	Note	B3G	---
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	40	V
Maximum RMS Voltage	$V_{RMS}$	28	V
Maximum DC Blocking Voltage	$V_{DC}$	40	V
Average Rectified Output Current @ $T_L=115^\circ\text{C}$ , (Fig.1)	$I_{(AV)}$	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave	$I_{FSM}$	75	A
Forward Voltage (4) IF=0.5A IF=1.0A @ $T_j=25^\circ\text{C}$ IF=3.0A	$V_F$	0.34 0.39 0.47	V
Leakage Current (4) $V_{DC}=\text{Rated}$ @ $T_j=25^\circ\text{C}$ @ $T_j=125^\circ\text{C}$	$I_R$	200 40	$\mu\text{A}$ mA
Typical junction capacitance (5)	$C_T$	300	pF
Operating junction temperature	$T_J$	-55 to +150	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150	$^\circ\text{C}$
THERMAL CHARACTERISTIC	SYMBOL	Typical	UNIT
Typical thermal resistance_Junction to Case (6)	$R_{\theta JC}$	29	$^\circ\text{C/W}$
Typical thermal resistance_Junction to Ambient(6)	$R_{\theta JA}$	104	$^\circ\text{C/W}$
Typical thermal resistance_Junction to Lead (6)	$R_{\theta JL}$	22	$^\circ\text{C/W}$

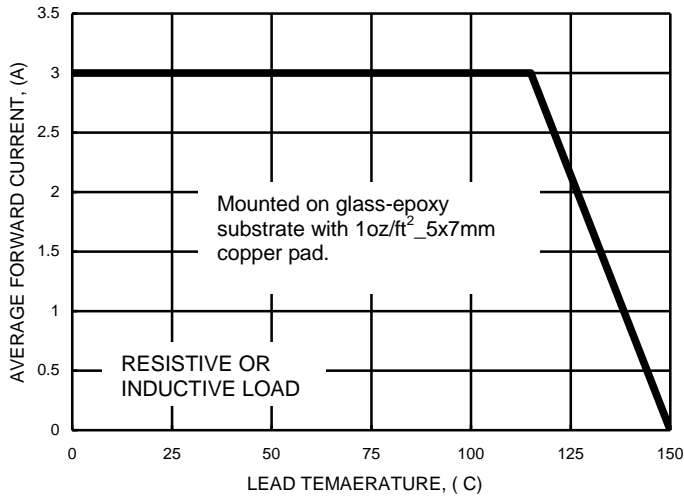
Note :

- (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) 300us Pulse width, 2% Duty cycle.
- (5) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- (6) Thermal Resistance test performed in accordance with JESD-51. Unit mounted on glass-epoxy substrate with 1oz/ft<sup>2</sup>\_7x5 mm copper pad.

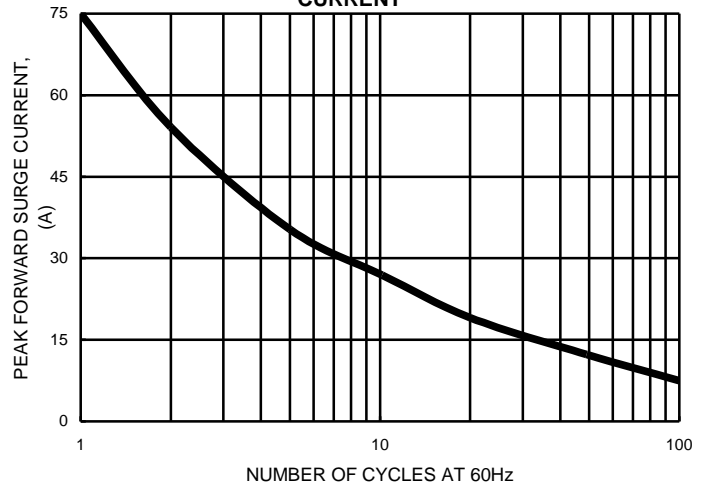
REV. 3, Oct. 2021, KSHP11

**RATING AND CHARACTERISTIC CURVES**  
**FB340LM**

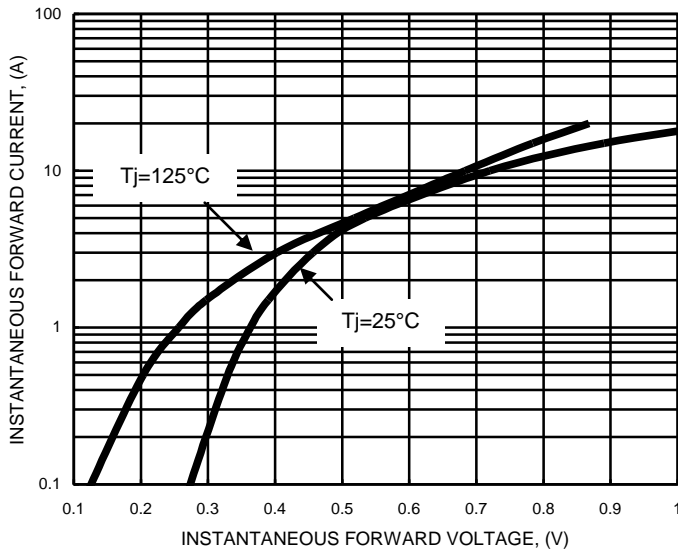
**FIG.1- FORWARD CURRENT DERATING CURVE**



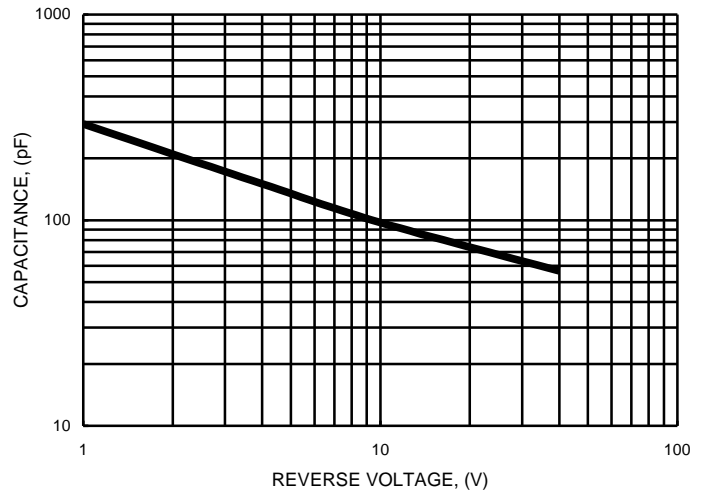
**FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT**



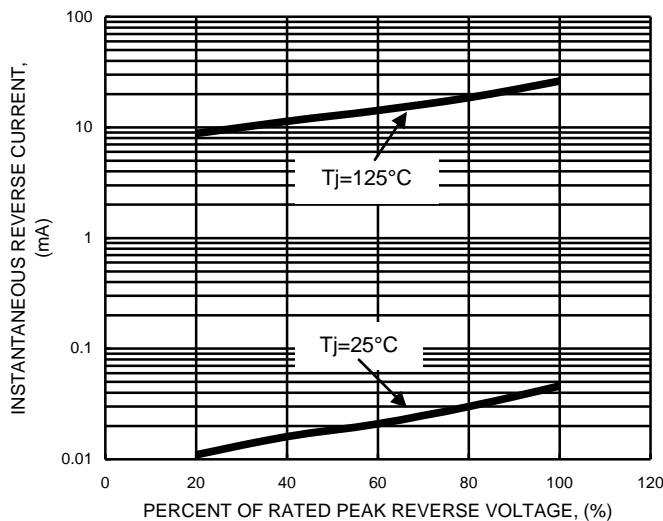
**FIG.3- TYPICAL FORWARD CHARACTERISTICS**



**FIG.4- TYPICAL JUNCTION CAPACITANCE**



**FIG.5- TYPICAL REVERSE CHARACTERISTICS**



**FB340LM**

**Ordering Information :**

Part Number	Package	Packing	
		Qty.	Carrier
FB340LM	DO-222AA	12000	Tape & Reel

**Marking Information :**

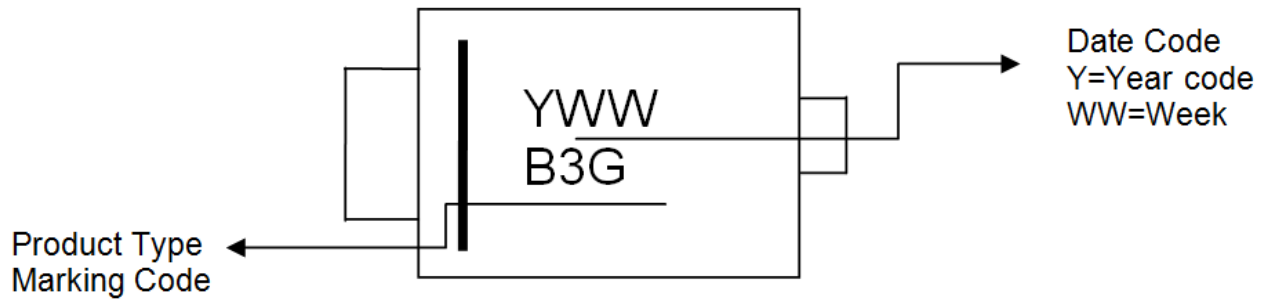
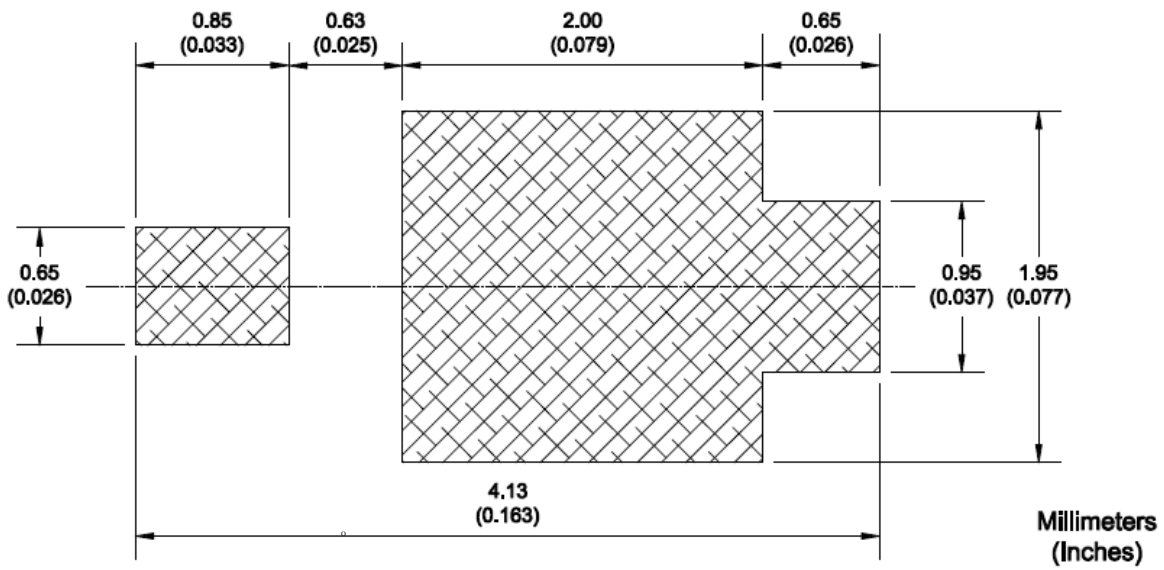


Fig.6 Recommended Foot Print of DO-222AA with Mite Flat



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