

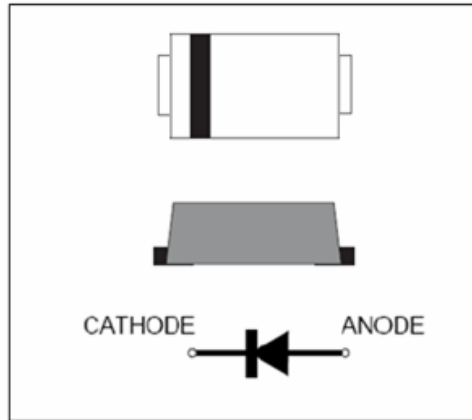
LUMBF105 thru LUMBF160

Glass Passivated Junction Ultra Fast Rectifiers

Reverse Voltage 50 to 600V Forward Current 1.0A

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * High temperature metallurgically bonded construction
- * Glass passivated chip
- * Capable of meeting environmental standards of MIL-S-19500
- * For use in high frequency rectifier circuits
- * Fast switching for high efficiency
- * High temperature soldering guaranteed: 260°C/10 seconds



we declare that the material of product is halogen free (green epoxy compound).

Mechanical Data

Case: JEDEC SMB-FL, molded plastic body

Terminals: Plated leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.066 g

Handling precaution: None

Electrical Characteristic

1. Maximum & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	LUMB F105	LUMB F110	LUMB F115	LUMB F120	LUMB F140	LUMB F150	LUMB F160	Unit
device marking code		UM105	UM110	UM115	UM120	UM140	UM150	UM160	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	400	500	600	V
Maximum RSM voltage	V_{RSM}	35	70	105	140	280	350	420	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	400	500	600	V
Maximum average forward rectified current at TC = 75°C	IF(AV)	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Typical thermal resistance (Note 2)	R θ JA R θ JC	135 25							°C/W
Operating junction and storage temperature range	TJ, TSTG	-50 to +150							°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	LUMB F105	LUMB F110	LUMB F115	LUMB F120	LUMB F140	LUMB F150	LUMB F160	Unit	
Maximum Instantaneous Forward Voltage (IF = 1.0 Amps, TJ = 25°C)	V_F	0.93			1.25		1.5		V	
Maximum full load reverse current, full cycle average, (note2) (Rated dc Voltage, TJ = 125°C) (Rated dc Voltage, TJ = 25°C)	IR	150 5.0								μA
Typical reverse recovery time (Note 1)	trr	35			50				ns	
Typical junction capacitance at 4.0V, 1MHz	CJ	45								PF

NOTES:

1. IF = 0.5A, IR = 1.0A, IRR = 0.25A
2. 8.0mm² (.013mm thick) land areas

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2. Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

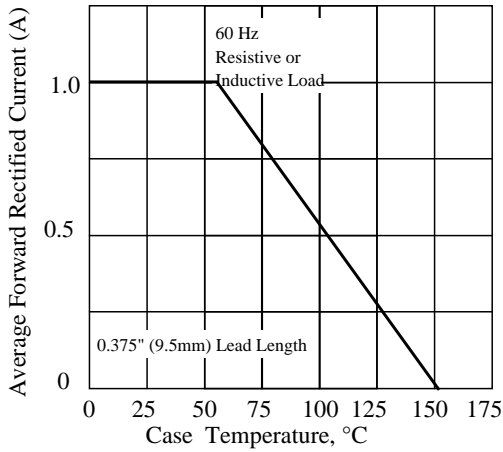


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

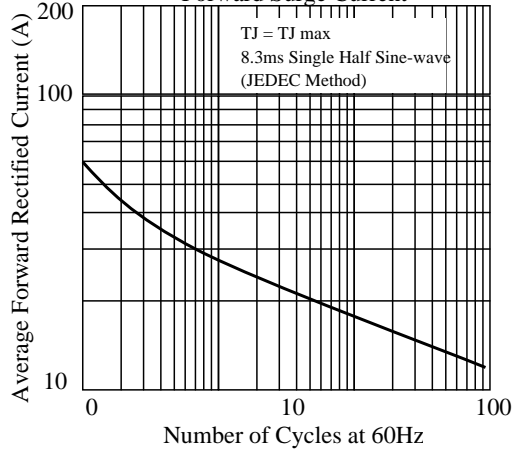


Fig 3. - Typical Instantaneous Forward Characteristics

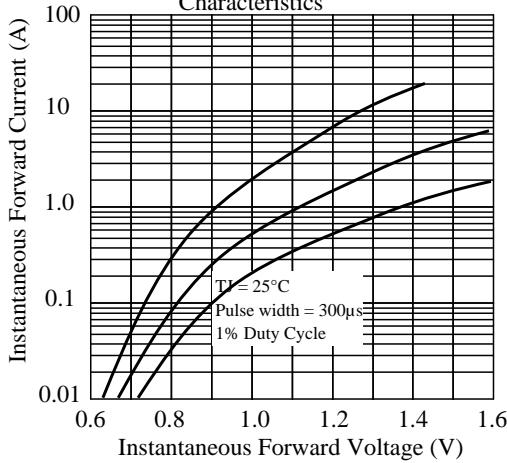


Fig 4. - Typical Reverse Characteristics

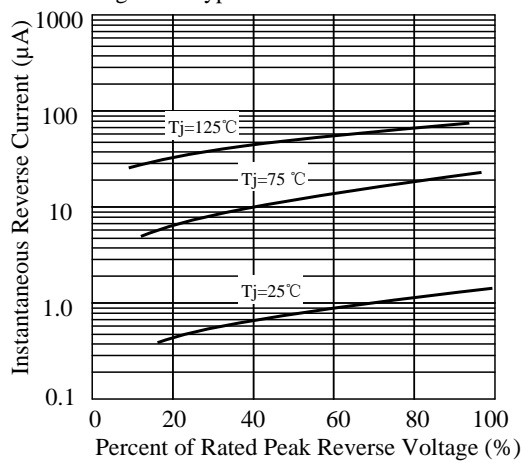


Fig 5. - typical transient thermal impedance

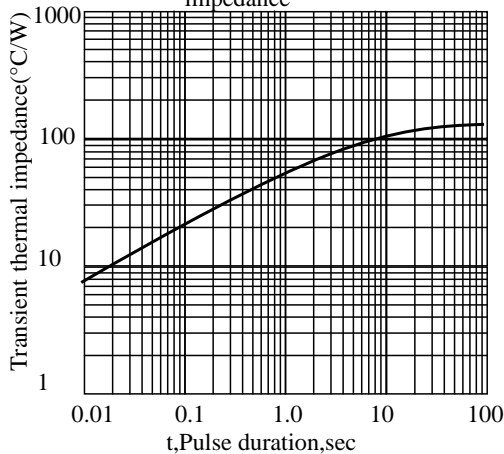
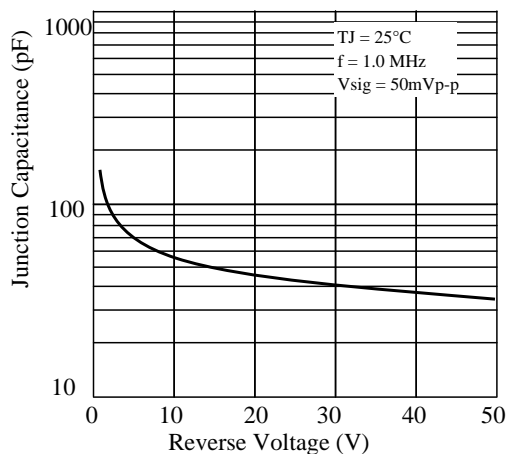


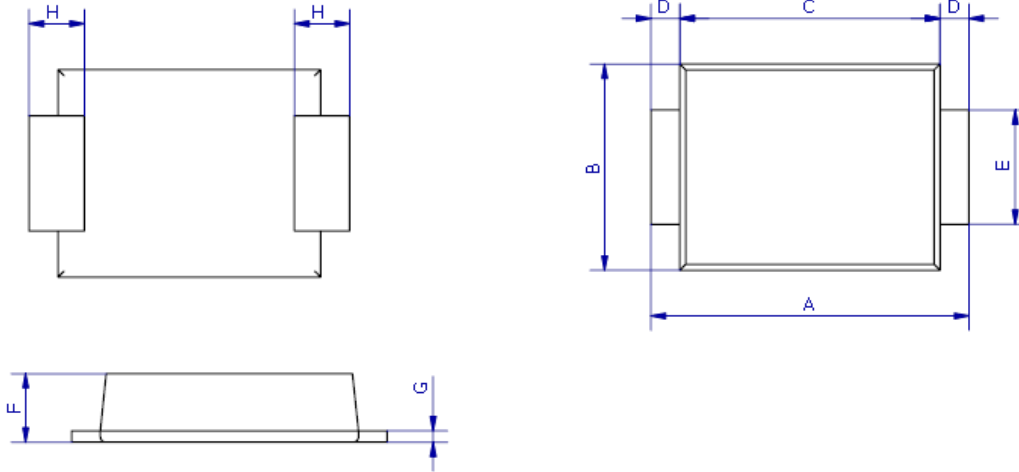
Fig 6. - Typical Junction Capacitance



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3. dimension:

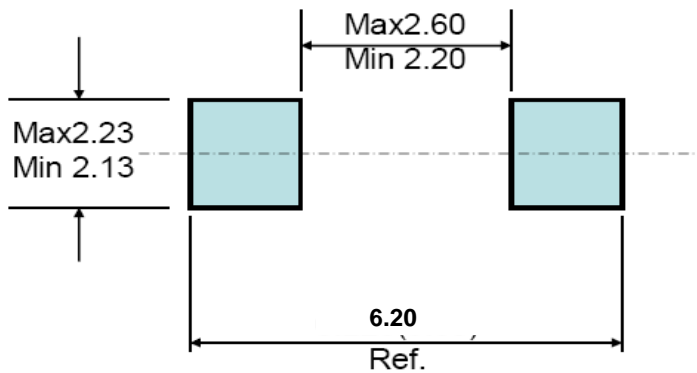
SMB-FL



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	5.3	5.7	0.209	0.224
B	3.4	3.8	0.134	0.150
C	4.3	4.7	0.169	0.185
D	0.45Typ		0.018Typ	
E	1.9	2.1	0.0748	0.08268
F	1.05	1.40	0.04134	0.05512
G	0.2	0.3	0.00591	0.00984
H	0.95Typ		0.037Typ	

Mounting Pad Layout

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4. Update Record

版次	更新记录	更新作者	更新日期
1	第一版	周杰	2014.04.30

单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)