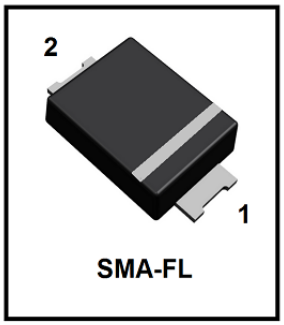
FFMAF101 thru FFMAF107T

Surface Mount Glass Passivated Junction Fast Recovery Rectifiers

Reverse Voltage 50 to 1000V Forward Current 1.0A

FEATURES

* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
* High temperature metallurgically bonded construction
* Cavity-free glass passivated junction
* Capable of meeting environmental standards of MIL-S-19500
* Typical IR less than 1.0μA
* High temperature soldering guaranteed: 260°C/10 seconds



We declare that the material of product is Haloggen free (green epoxy compound)

Mechanical Data

Case: JEDEC SMA-FL, molded plastic over glass DIE

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

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 28mg

Handling precautin:None

Electrical Characteristic

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

Parameter Symbol	symbol	FFMAF 101	FFMAF 102	FFMAF 103	FFMAF 104	FFMAF 105	FFMAF 106	FFMAF 107	FFMAF 107P	FFMAF 107T	Unit
Device marking code		FF11	FF12	FF13	FF14	FF15	FF16	FF17	FF17P	FF17T	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	1000	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	700	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	1000	1000	V
Maximum average forward rectified current lead length at T_C = 75°C(Note 2)	$I_{F(AV)}$	1.0									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30									A
Maximum reverse recovery time (Note 1)	trr	150				250	500		250	160	ns
Typical thermal resistance (Note 2)	RθJA RθJL	150 35									°C/W
Operating junction temperature range	T_J	–55 to +150									°C
storage temperature range	T_{STG}	–55 to +150									°C

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

Parameter Symbol	symbol	FFMAF 101	FFMAF 102	FFMAF 103	FFMAF 104	FFMAF 105	FFMAF 106	FFMAF 107	FFMAF 107P	FFMAF 107T	Unit
Maximum instantaneous forward voltage at 1.0A	V_F	1.3									V
Maximum DC reverse current TJ= 25°C at rated DC blocking voltage TJ = 125°C	I_R	5.0 100									μA
Typical junction capacitance at 4.0V, 1MHz (Note 2)	C_J	15.0									PF

NOTES:

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

FFMAF101 thru FFMAF107T

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

Fig. 1 – Forward Current Derating Curve

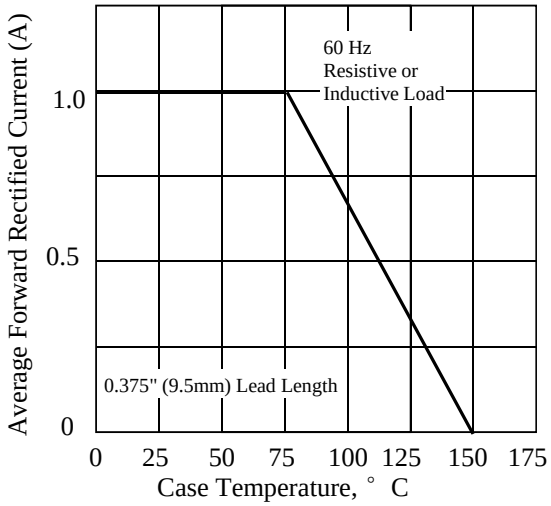


Fig. 2 – Maximum Non-repetitive Peak Forward Surge Current

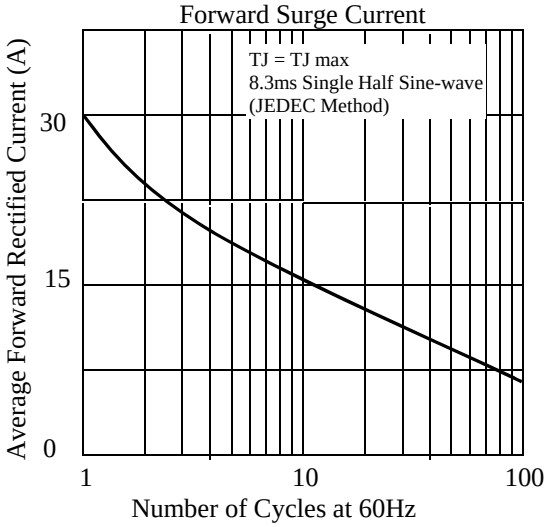


Fig 3. – Typical Instantaneous Forward Characteristics

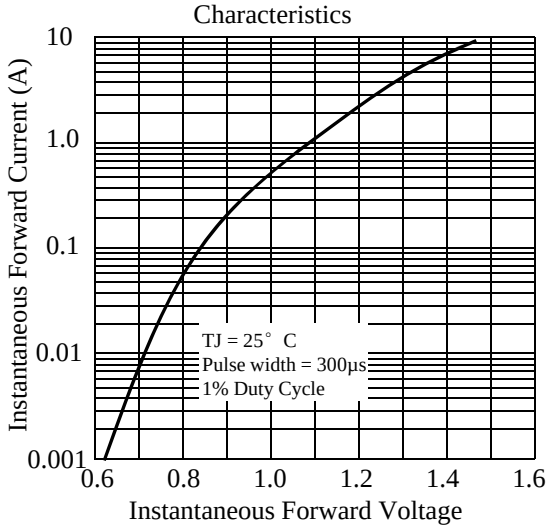


Fig 4. – Typical Reverse Characteristics

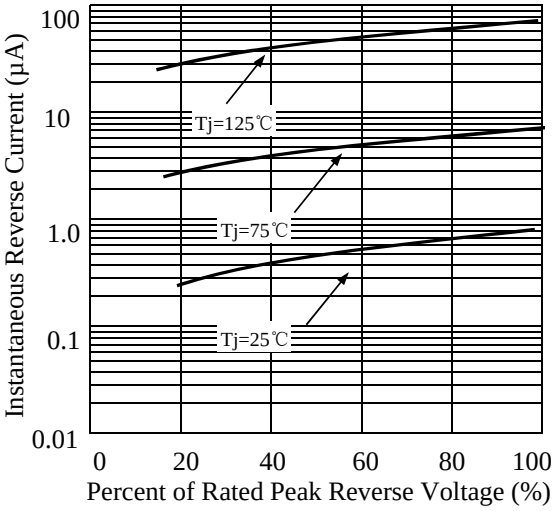


Fig 5. – typical transient thermal impedance

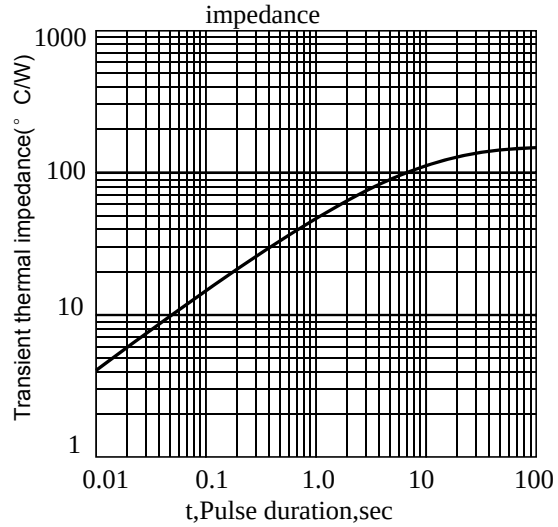
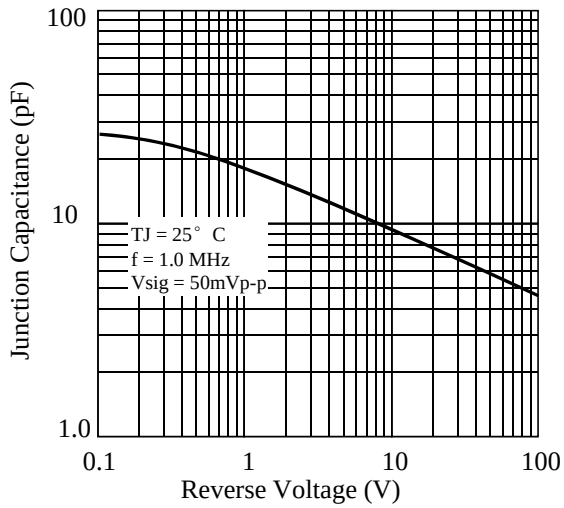
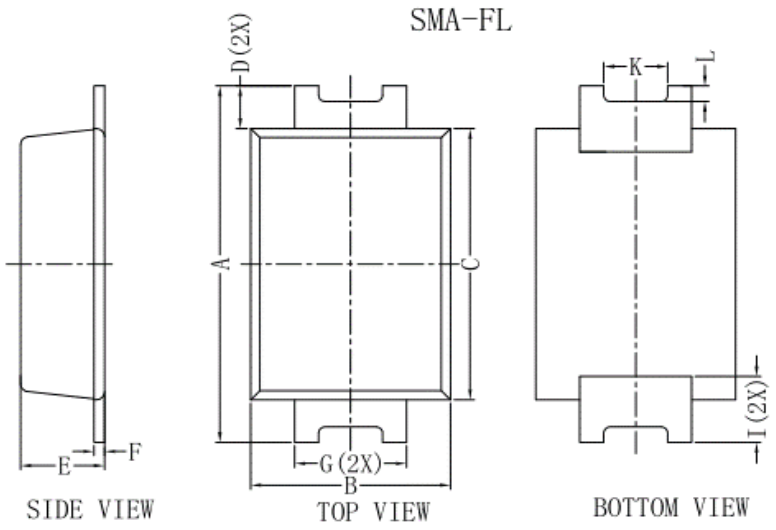


Fig 6. – Typical Junction Capacitance



3.OUTLINE AND DIMENSIONS



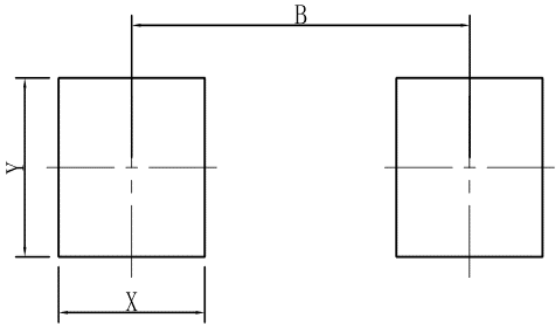
SMA-FL			
DIM	MIN	MAX	Typ.
A	4.40	4.80	4.60
B	2.30	2.70	2.60
C	3.30	3.70	3.50
D			0.55
E	0.90	1.20	1.05
F	0.11	0.21	0.17
G	1.30	1.50	1.40
I	-	-	0.90
K	-	-	0.80
L	-	-	0.20
All Dimensions in mm			

GENERAL NOTES

1.Top package surface finish Ra0.4±0.2um

2.Bottom package surface finish Ra0.7±0.2um

4.SOLDERING FOOTPRINT



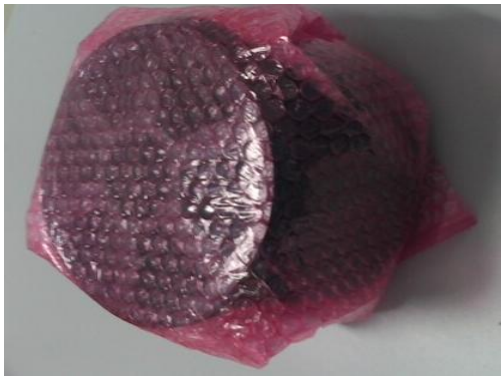
SMA-FL	
DIM	(mm)
X	1.60
Y	1.80
B	3.70

8.1.2 Label position and QA stamp position.(Empty area) 标签张贴位置及QA印章位置。（印章盖在标签空白区

7英寸卷盘标签张贴及QA印章位置

13英寸卷盘标签张贴及QA印章位置

8.1.3 Ensure direction In the same reel. The same steel coil plate direction，With antistatic bubble to package reel。Refer to the below picture.
同一箱内的卷盘方向一致,用防静电泡沫对卷盘进行包裹。



7英寸卷盘防静电泡沫包裹

13英寸卷盘防静电泡沫包裹

8.1.4 Put in the antistatic packing box after packaged reels. And QA stamp on the box label .
将包装好的卷盘放入防静电纸箱中，并在盒标签上盖章。

7 英寸卷盘内盒及标签

13 英寸卷盘内盒及标签

8.1.5 Product use printing inner box. 产品使用LRC印字内箱。

7英寸卷盘内箱印字（侧面）

13英寸卷盘内箱印字（正面）

8.1.6 Inner box packing quantity requirement.内盒包装数量要求。

Product Description	QTY
SOD123-FL	1-10Reels
SOD323-HE	1-10Reels
SMA-FL	1-7Reels
SMB-FL	1-4Reels

8.1.7 With transparent tape sealing. 透明胶带封箱。

7英寸内箱封盒

13英寸内箱封盒

8.1.8 Outer box size and packing quantity requirement,外箱尺寸及包装数量要求。

Product Description	卷盘尺寸	Height（H）	Width（W）	Length（L）	Max. Qty
Power Device	7 英寸	410mm	400mm	445mm	12
Power Device	13 英寸	410mm	400mm	445mm	5

7 英寸卷盘产品装箱

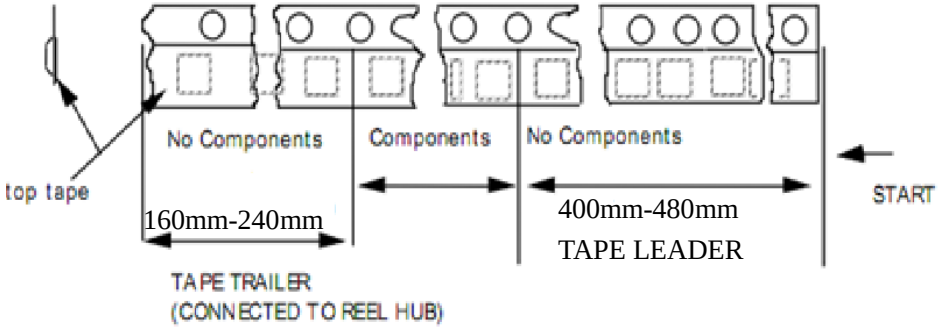
13 英寸卷盘产品装箱

8. 2 Standard Products Taping Specification
标准产品编带规范

8.2.1 Tape length of no component
空带长度说明
Taping leader length 引导部分：440mm±40mm ， Tape trailer 尾部：200mm±40mmt

Figure 4

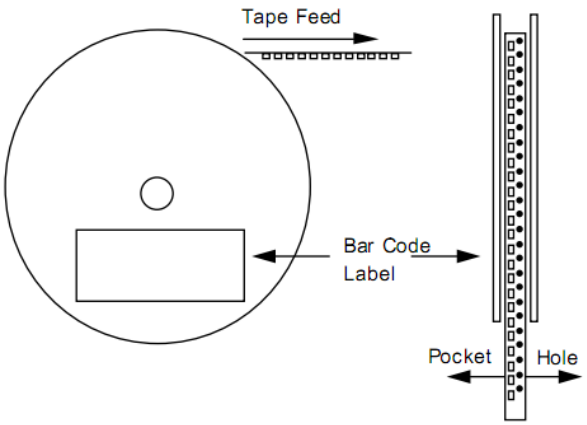
Tape Ends For Finished Goods Reel



8.2.2 Component packaging orientation: The cathode lead is close to the carrier tape's index hole.
产品放置方向：印阴极带引脚邻近载带索引孔

8.2.3 Tape enwind orientation

编带缠绕方向要求



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)