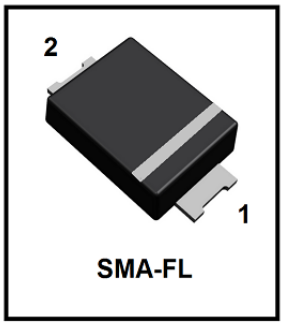
FMAF401 thru FMAF407

Surface Mount Glass Passivated Junction 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



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

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

Electrical Characteristic

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

Parameter Symbol	symbol	FMAF 401	FMAF 402	FMAF 403	FMAF 404	FMAF 405	FMAF 406	FMAF 407	Unit
Device marking code		M01	M02	M03	M04	M05	M06	M07	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RSM voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current lead length at T_c = 75°C(Note 1)	$I_{F(AV)}$	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Typical thermal resistance (Note1)	$R\theta J_A$ $R\theta J_L$	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	FMAF 401	FMAF 402	FMAF 403	FMAF 404	FMAF 405	FMAF 406	FMAF 407	Unit
Maximum instantaneous forward voltage at 1.0A	V_F	1.1							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 1)	C_J	15.0							PF

NOTES:

1. 8.0mm^2 (.013mm thick) land areas

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

Fig. 1 – Forward Current Derating Curve

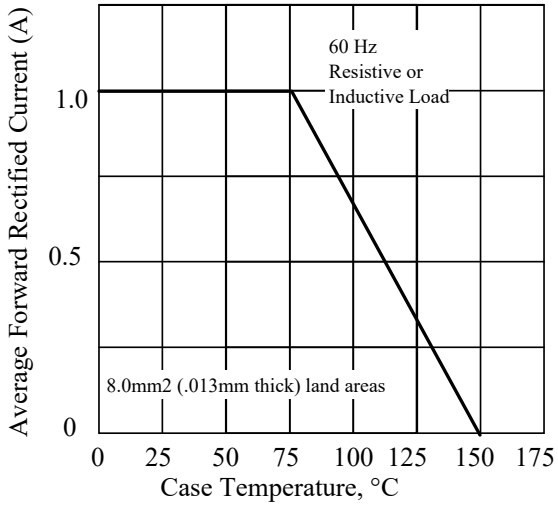


Fig. 2 – Maximum Non-repetitive Peak Forward Surge Current

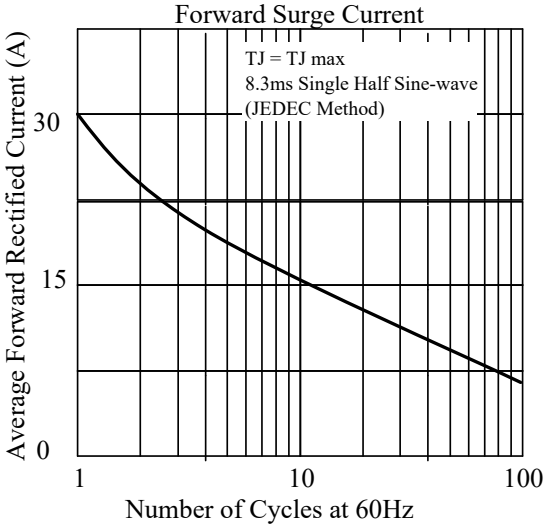


Fig 3. – Typical Instantaneous Forward Characteristics

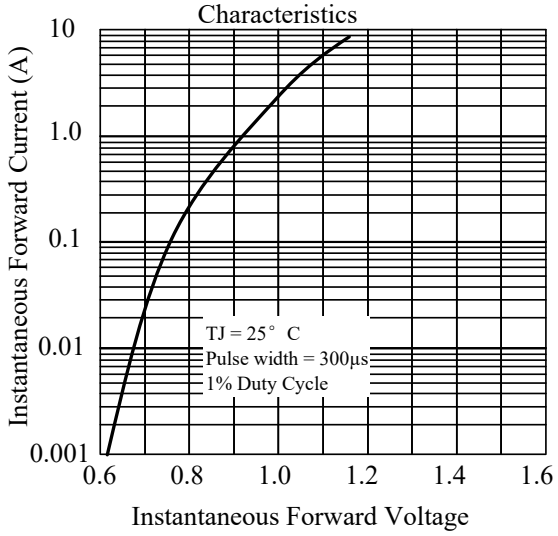


Fig 4. – Typical Reverse Characteristics

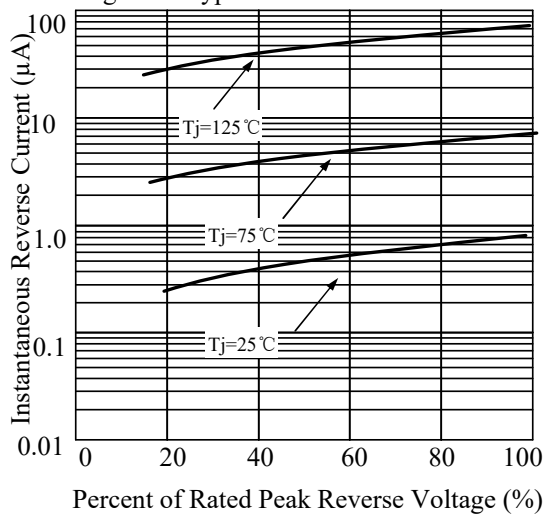


Fig 5. – typical transient thermal impedance

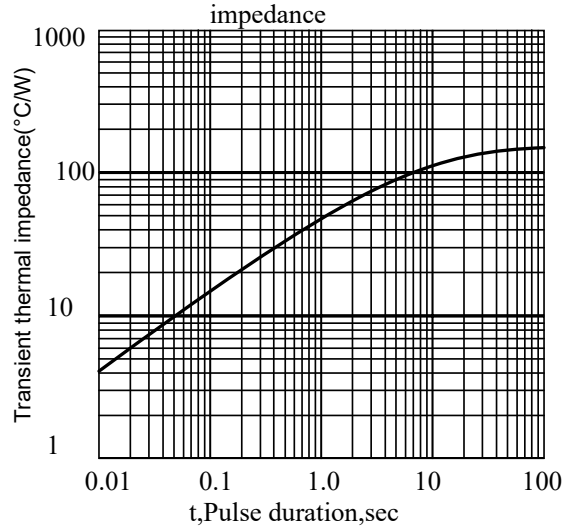
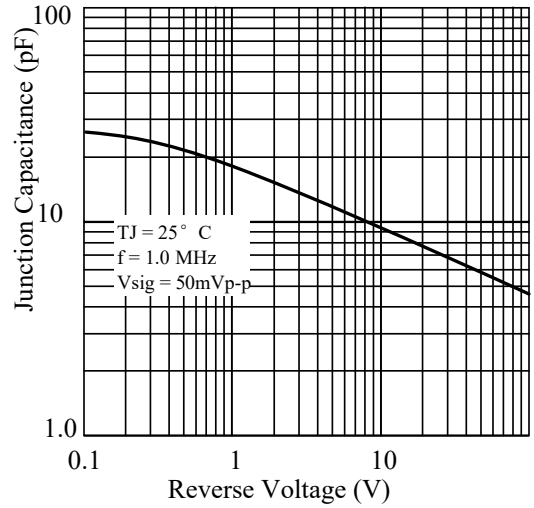
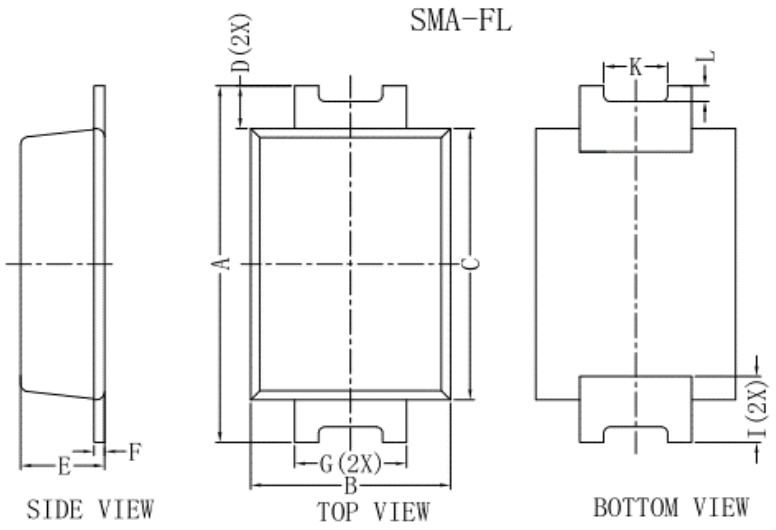


Fig 6. – Typical Junction Capacitance

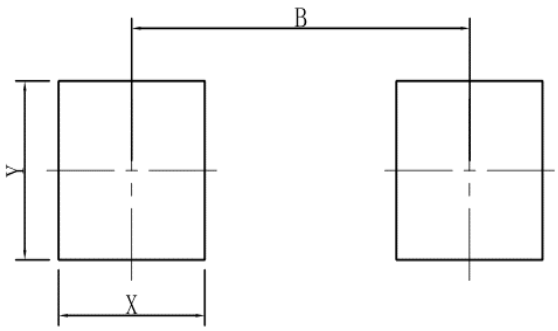


3.OUTLINE AND DIMENSIONS



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			

4.SOLDERING FOOTPRINT



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

DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.

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