

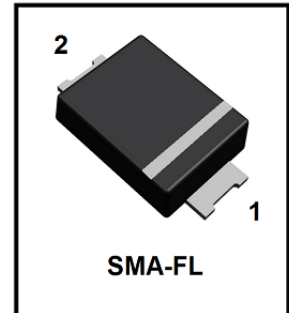
EFMAF240

S-EFMAF240

Surface Mount Glass Passivated Super Fast Rectifiers
Reverse Voltage 200V Forward Current 2.0A

1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0.
- High temperature metallurgically bonded construction.
- For use in high frequency rectifier circuits.
- Fast switching for high efficiency.
- Cavity-free glass passivated junction.
- Capable of meeting environmental standards of MIL-S-19500.
- 1.0 A operation at TC=75°C with no thermal runaway.
- High temperature soldering guaranteed:260°C/10 seconds.
- Typical IR less than 1.0μA.



2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
EFMAF240	EF24	3000/Tape&Reel
S-EFMAF240	EF24	3000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Maximum repetitive peak reverse voltage	VRRM	200	V
Maximum RMS voltage	VRMS	140	V
Maximum DC blocking voltage	VDC	200	V
Maximum average forward rectified current at TC = 75°C	IF(AV)	2	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	60	A
Typical thermal resistance (Note 2)	RθJA	150	°C/W
	RθJC	25	
Operating junction and storage temperature range	TJ, TSTG	-50 ~+150	°C

4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Maximum instantaneous forward voltage at 2.0A	VF	-	-	0.95	V
Maximum DC reverse current TA = 25°C at rated DC blocking voltage Tj = 125°C	IR	- -	- -	5 100	μA
Typical reverse recovery time (Note 1)	trr		35		ns
Typical junction capacitance at 4.0V, 1MHz	CJ	-	15	-	PF

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

5. ELECTRICAL CHARACTERISTICS CURVES

Fig. 1 - Forward Current Derating Curve

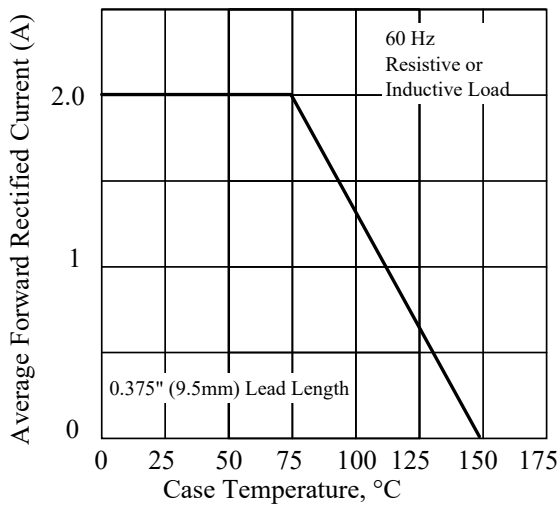


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

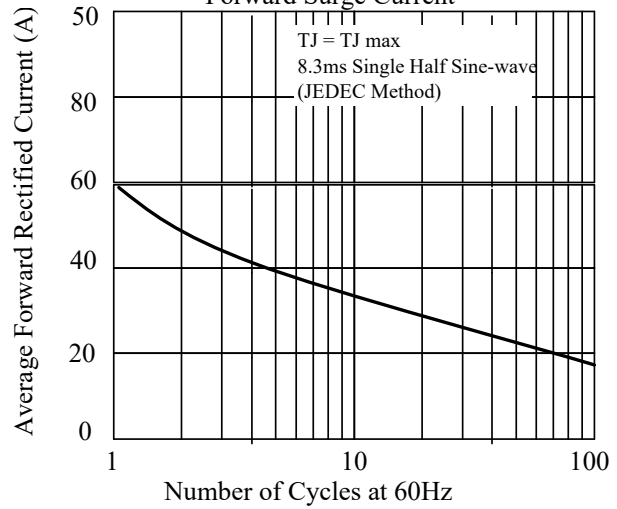


Fig. 3. - Typical Instantaneous Forward Characteristics

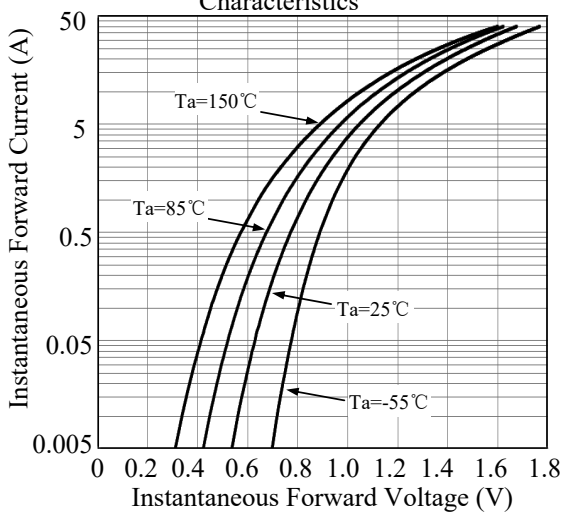


Fig. 4. - Typical Reverse Characteristics

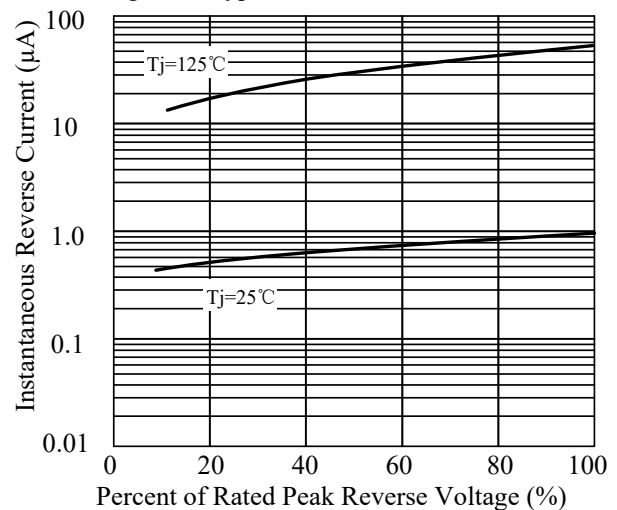


Fig. 5. - typical transient thermal impedance

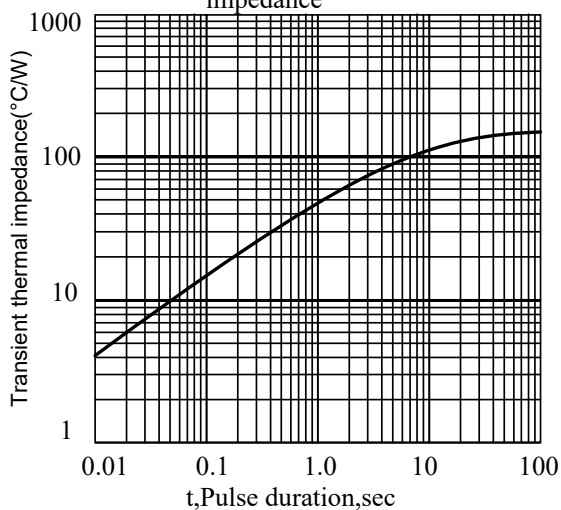
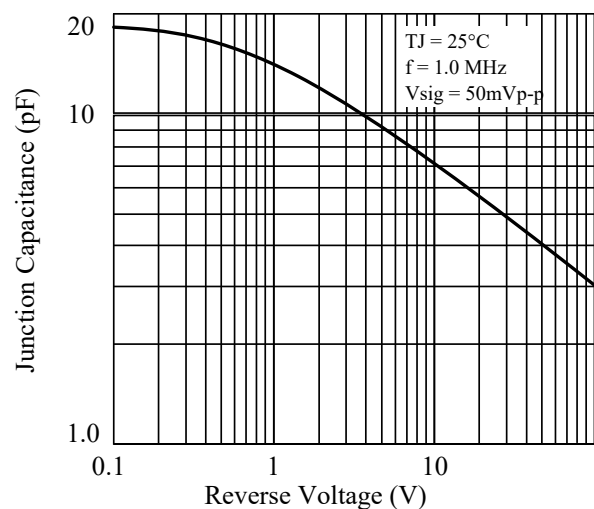
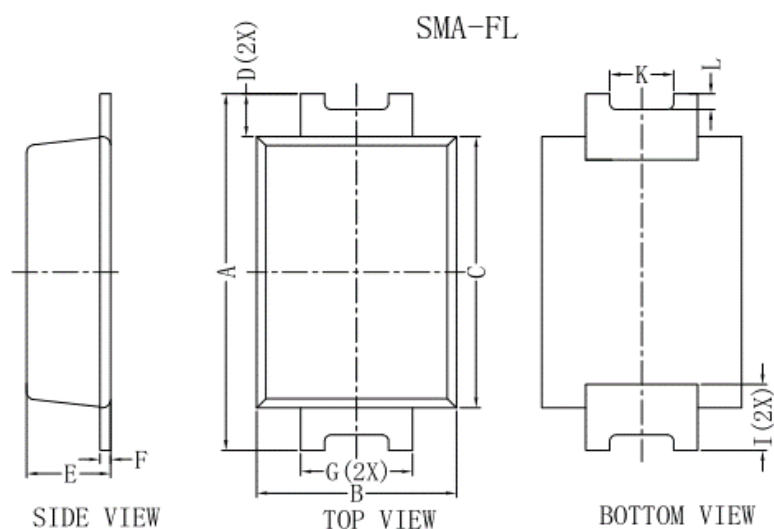


Fig. 6. - Typical Junction Capacitance



6.OUTLINE AND DIMENSIONS

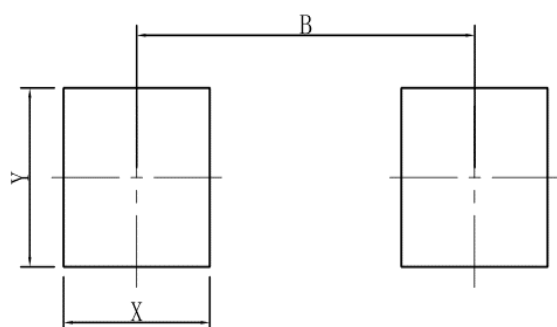


SMA-FL			
DIM	MIN	MAX	Typ.
A	4.40	4.80	4.60
B	2.30	2.70	2.60
C	3.30	3.70	3.50
D			0.55
E	0.90	1.20	1.05
F	0.11	0.21	0.17
G	1.30	1.50	1.40
I	-	-	0.90
K	-	-	0.80
L	-	-	0.20
All Dimensions in mm			

GENERAL NOTES

- 1.Top package surface finish Ra0.4±0.2um
- 2.Bottom package surface finish Ra0.7±0.2um

7.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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