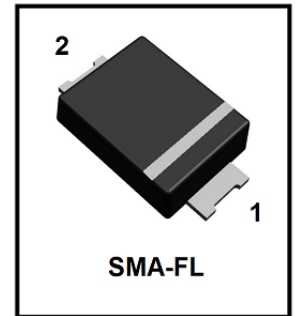


# S-HFMAF280

Surface Mount Glass Passivated High Efficiency Rectifiers  
Reverse Voltage 1000V 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.
- Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes.
- Ultrafast recovery time for high efficiency
- Excellent high temperature switching
- Soft recovery characteristics
- Cavity-free glass passivated junction
- High temperature soldering guaranteed:260°C/10 seconds, 5 lbs. (2.3kg) tension



## 2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
S-HFMAF280	HF28	3000/Tape&Reel

## 3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Maximum repetitive peak reverse voltage	VRRM	1000	V
Maximum RMS voltage	VRMS	700	V
Maximum DC blocking voltage	VDC	1000	V
Maximum average forward rectified current lead length (See fig. 2) 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	50	A
Typical thermal resistance (Note 2)	RθJA	150	°C/W
	RθJL	35	
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	-	-	1.85	V
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TJ = 100°C	IR	-	-	5 50	μA
Typical reverse recovery time (Note 1)	trr		75		ns
Typical junction capacitance at 4.0V, 1MHz	CJ	-	17	-	PF

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

## 5. ELECTRICAL CHARACTERISTICS CURVES

Fig. 1 - Forward Current Derating Curve

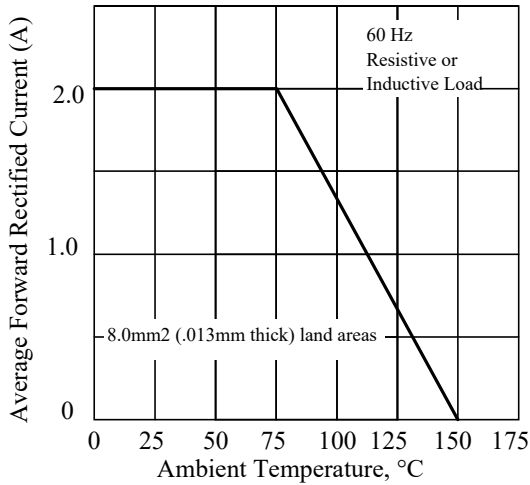


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

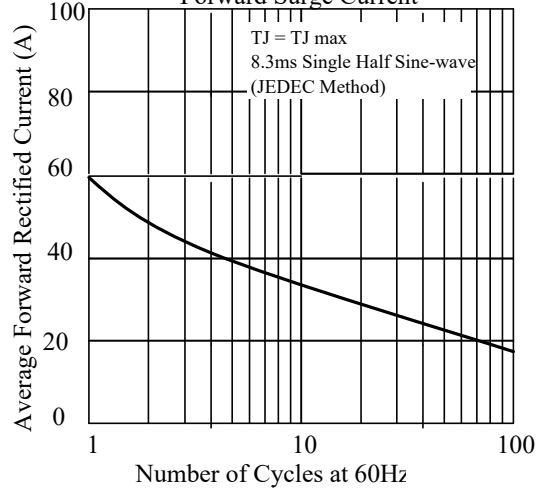


Fig 3. - Typical Instantaneous Forward Characteristics

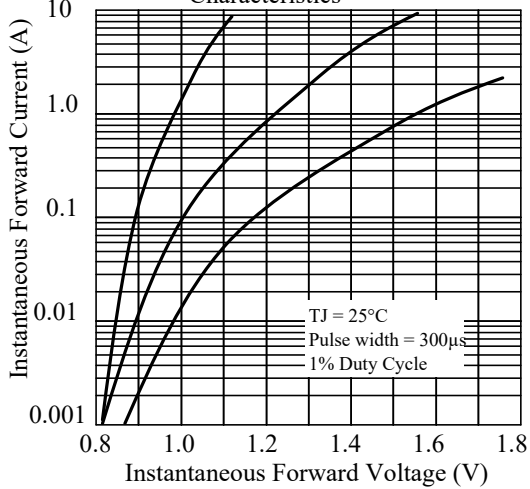


Fig 4. - Typical Reverse Characteristics

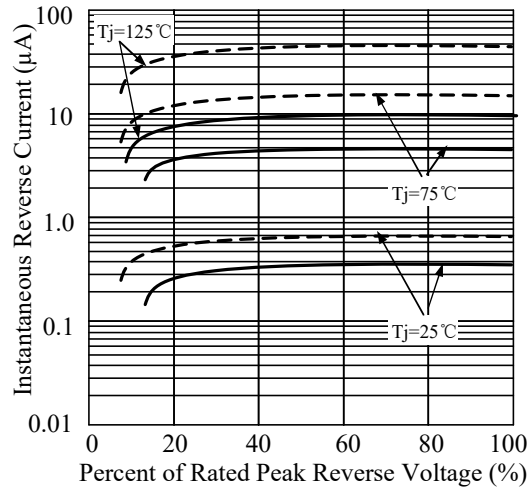


Fig 5. - typical transient thermal impedance

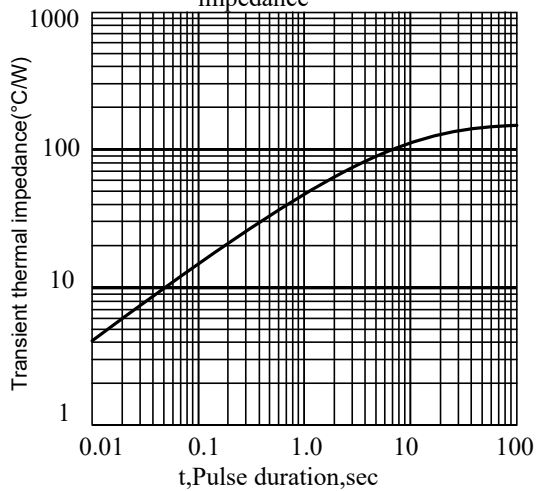
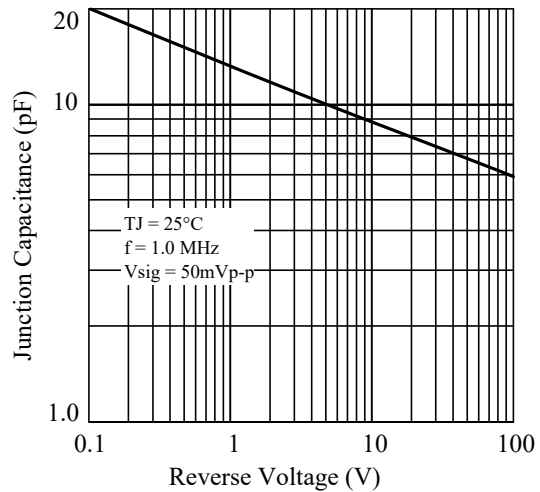
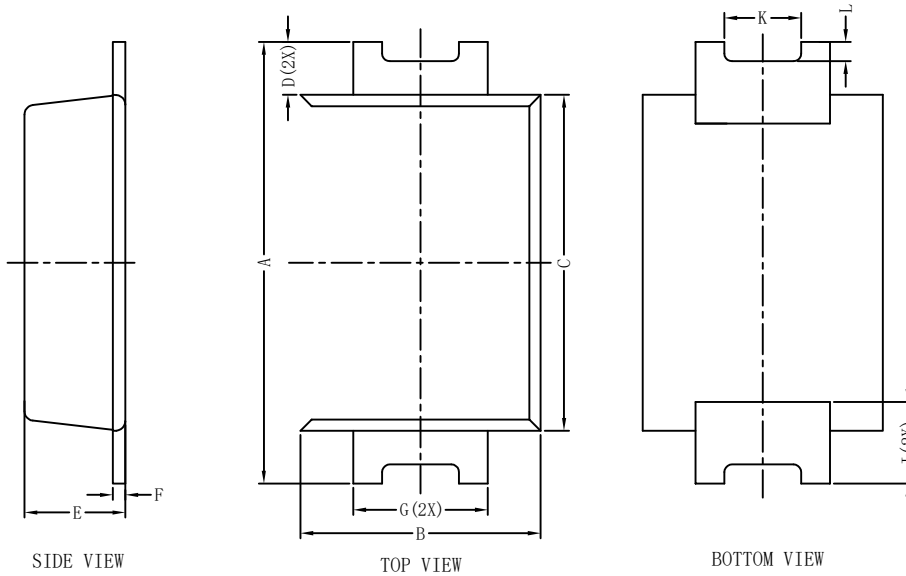


Fig 6. - Typical Junction Capacitance



## 6. OUTLINE AND DIMENSIONS

SMA-FL

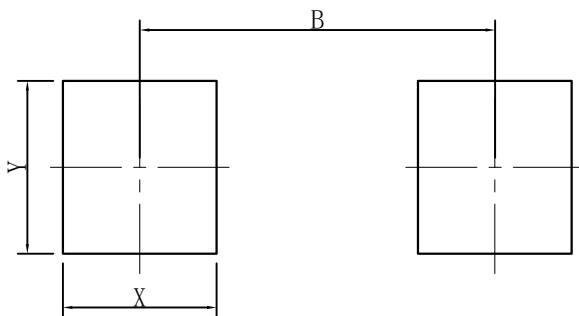


SMA-FL			
DIM	MIN	MAX	TYP
A	4.40	4.80	4.60
B	2.30	2.70	2.60
C	3.30	3.70	3.50
D	0.30	0.80	0.55
E	0.90	1.20	1.05
F	0.11	0.21	0.17
G	1.30	1.50	1.40
I	0.60	1.20	0.90
K	0.50	1.10	0.80
L	0.05	0.40	0.20
All Dimensions in mm			

### 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.
- Before you use our Products for new Project, you are requested to carefully read this document and fully understand its contents. LRC shall not be in any way responsible or liable for failure, malfunction or accident arising from the use of any LRC's Products against warning, caution or note contained in this document.
- All information contained in this document is current as of the issuing date and subject to change without any prior notice. Before purchasing or using LRC's Products, please confirm the latest information with a LRC sales representative.
- First edition: The information contained in this document is provided on an "as is" basis and LRC does not warrant that all information contained in this document is accurate and/or error-free. LRC shall not be in any way responsible or liable for any damages, expenses or losses incurred by you or third parties resulting from inaccuracy or errors of or concerning such information.

单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)