

# Silicon Rectifiers

#### **Feature**

- > For surface mounted applications
- Low profile package
- Glass Passivated Chip Juntion
- Easy to pick and place
- ▶ Lead free in comply with EU RoHS 2011/65/EU directives



### **Mechanical Characteristics**

- Case: SMAF
- > Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg 0.00086oz

## Absolute maximum rating@25℃

Parameter	Symb ol	PM1	PM2	PM3	PM4	PM5	PM6	PM7	Unit s
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward  Rectified Current  at Ta = 65 °C	I <sub>F(AV)</sub>	1						A	
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	30						A	
Maximum Instantaneous Forward Voltage at 1A	V <sub>F</sub>	1.1						V	
Maximum DC Reverse  Current Ta = 25 °C  at Rated DC Blocking Voltage  Ta =125 °C	I <sub>R</sub>	5 50					μА		
Typical Junction Capacitance <sup>1)</sup>	Cj	4						pF	
Typical Thermal Resistance <sup>2</sup>	R <sub>θJA</sub>	180						°C	
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-55 ~ <b>+</b> 150					°C		

Silicon Rectifiers PM1-PM7

## **Typical Characteristics**

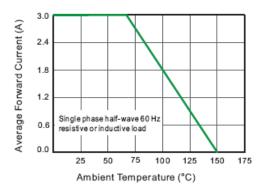
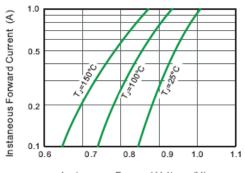


Fig.1 Forward Current Derating Curve



Instaneous Forward Voltage (V)
Fig.3 Typical Forward Characteristic

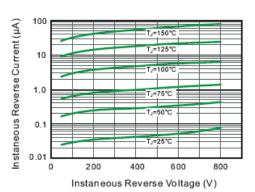


Fig.2 Typical Instaneous Reverse Characteristics

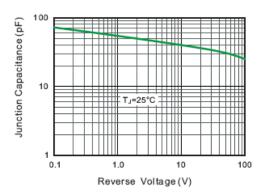
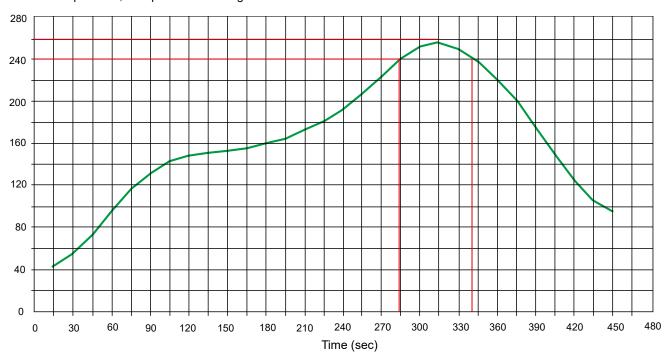


Fig.4 Typical Junction Capacitance

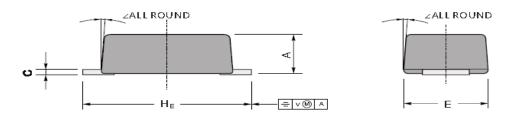
#### **Solder Reflow Recommendation**

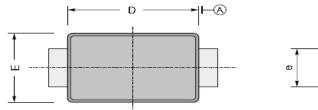
Peak Temp=257℃, Ramp Rate=0.802deg. ℃/sec

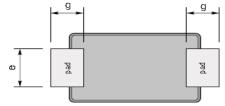


Silicon Rectifiers PM1-PM7

## **Product dimension (SMAF)**

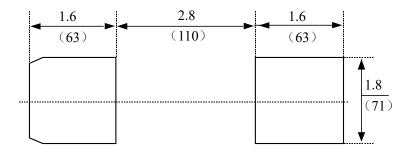






UNIT		Α	С	D	Ш	е	g	H <sub>E</sub>	۷
mm	max	1.3	0.23	3.7	2.7	1.6	1.3	4.9	
mm	min	1.1	0.18	3.3	2.4	1.3	1.0	4.4	. 7°
mil -	max	51	9.1	146	106	63	51	193	,
	min	43	7.1	130	94	51	39	173	

# The recommended mounting pad size



Unit:  $\frac{mm}{(mil)}$ 

# Ordering information

Device	Package	Reel	Shipping	
PM1-PM7	SMAF (Pb-Free)	7"	3000/ Tape & Reel	

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