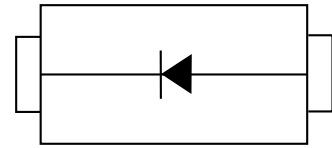


### Feature

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- High efficiency
- 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 °C

Parameter	Symbol	PUS1 AF	PUS1 BF	PUS1 DF	PUS1 GF	PUS1 JF	PUS1 KF	PUS1 MF	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS 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 at $T_a = 65\text{ °C}$	$I_{F(AV)}$	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	30							A
Maximum Instantaneous Forward Voltage at 1A	$V_F$	1.0			1.4	1.7			V
Maximum DC Reverse Current $T_a=25\text{ °C}$ at Rated DC Blocking Voltage $T_a=125\text{ °C}$	$I_R$	5 100							$\mu\text{A}$
Maximum Reverse Recovery Time <sup>1)</sup>	$t_{rr}$	50				75			nS
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	180							$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150							$^{\circ}\text{C}$

Typical Characteristics

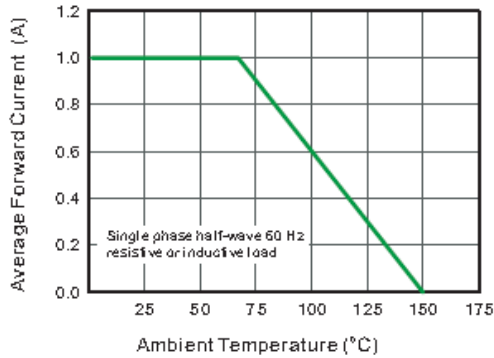


Fig.1 Forward Current Derating Curve

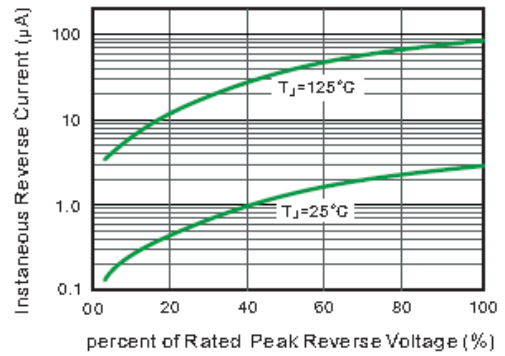


Fig.2 Typical Reverse Characteristics

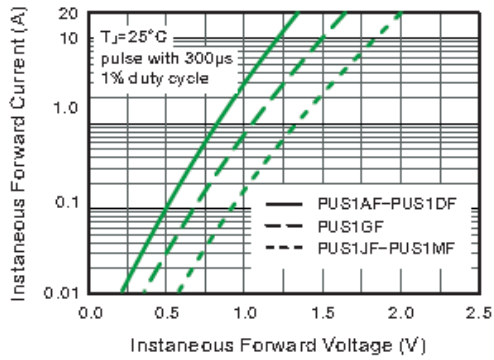


Fig.3 Typical Instantaneous Forward Characteristics

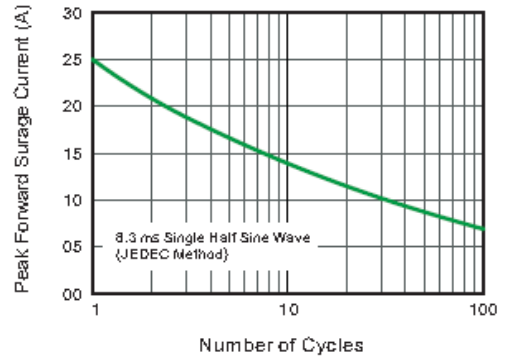
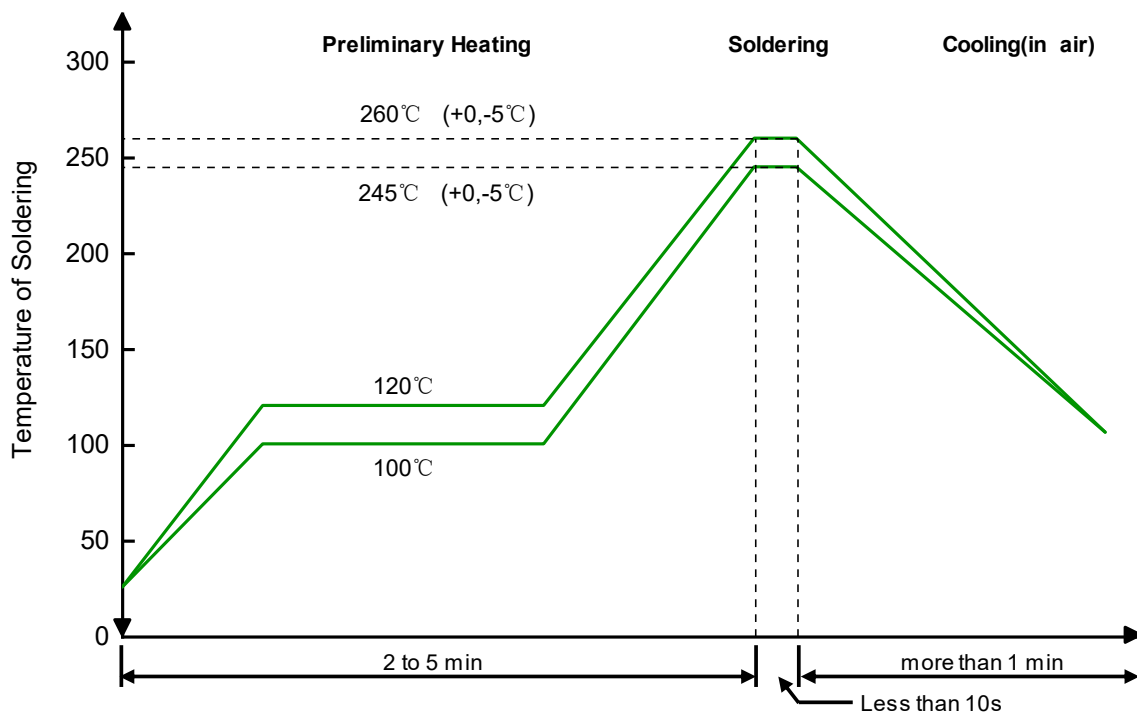


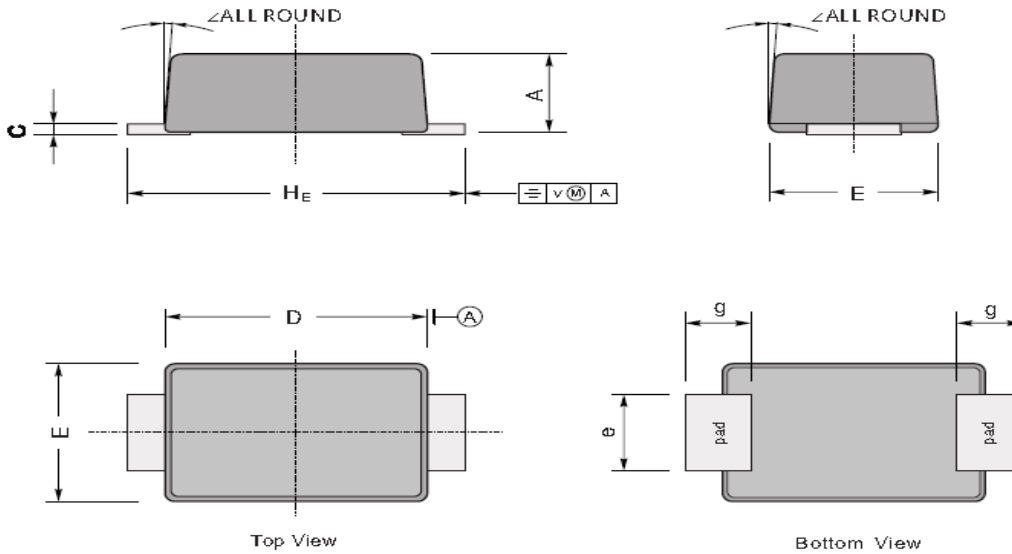
Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

Solder Reflow Recommendation



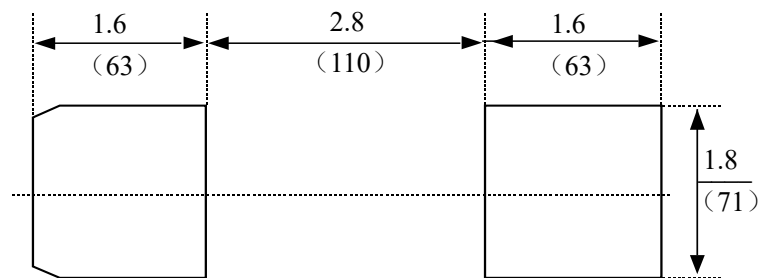
Remark: Pb free for 260°C; Pb for 245°C.

Product dimension (SMAF)



UNIT		A	C	D	E	e	g	H <sub>E</sub>	$\angle$
mm	max	1.2	0.23	3.7	2.7	1.6	1.3	4.9	7°
	min	0.9	0.18	3.3	2.4	1.3	1.0	4.4	
mil	max	47	9.1	146	106	63	51	193	
	min	35	7.1	130	94	51	39	173	

The recommended mounting pad size




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

Ordering information

Device	Package	Shipping
PUS1AF-PUS1MF	SMAF	3000/ Tape & Reel


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