

FEATURES

- | Low Reverse Leakage
- | High Forward Surge Capability
- | High Reliability
- | High Temperature Soldering Guaranteed:260°C/10seconds



DO-214AC(SMA)



Schematic Symbol

MECHANICAL DATA

- | Case:SMA Molded Plastic
- | Epoxy: UL 94v-0 Rate Flame Retardant
- | Lead: Pure Tin Plated, Lead Free

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS AND CHARACTERISTICS (T_A=25°C)

Symbol	Parameter	M1	M2	M3	M4	M5	M6	M7	Unit	
	Marking	M1	M2	M3	M4	M5	M6	M7		
V _{RRM}	Maximum repetitive peak reverse voltage	50	100	200	400	600	800	1000		
V _{RMS}	Maximum RMS voltage	35	70	140	280	420	560	700	V	
V _{DC}	Maximum DC blocking voltage	50	100	200	400	600	800	1000		
I _{F(AV)}	Maximum average forward rectified current	1.0								A
I _{FSM}	Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	30								
V _F	Maximum forward voltage I _F =1A	1.1								V
I _R	Maximum reverse current @V _{DC}	T _A =25°C							5	μA
		T _A =100°C							100	
R _{θJA}	Typical thermal resistance (Note 1)	47								°C/W
C _J	Type junction capacitance V _R =4.0V,f=1MHz	65								PF
T _J	Operating junction temperature rang	-55~+125								°C
T _{STG}	Storage temperature rang	-55~+150								°C

Note: 1) Thermal resistance from junction to ambient, PCB mounted.

CHARACTERISTIC CURVES

Fig.1 Typical Forward Characteristic

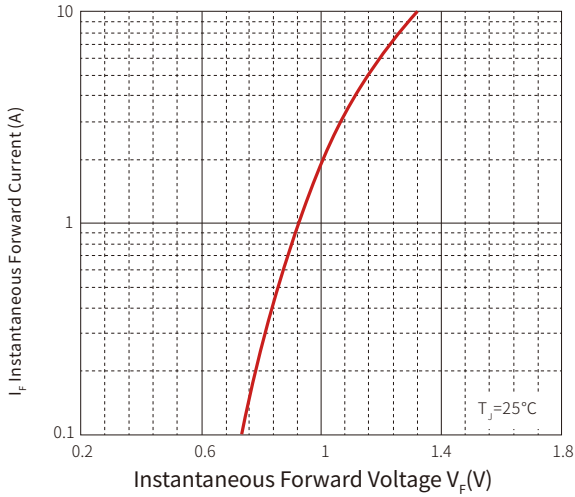


Fig.2 Forward Current Derating Curve

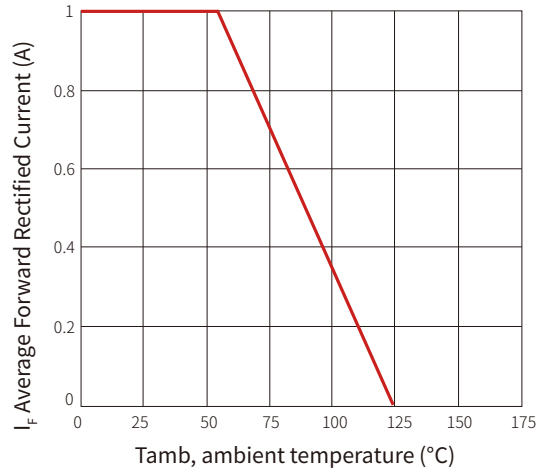


Fig.3 Maximum Non Repetitive Peak Forward Surge Current

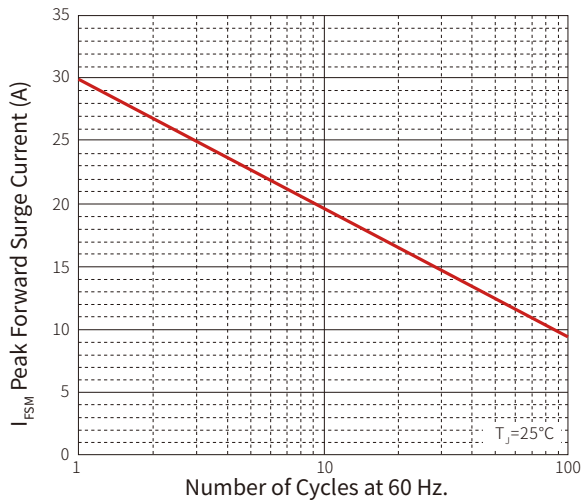
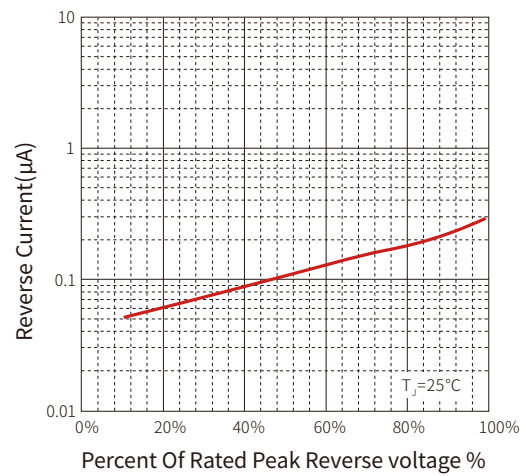
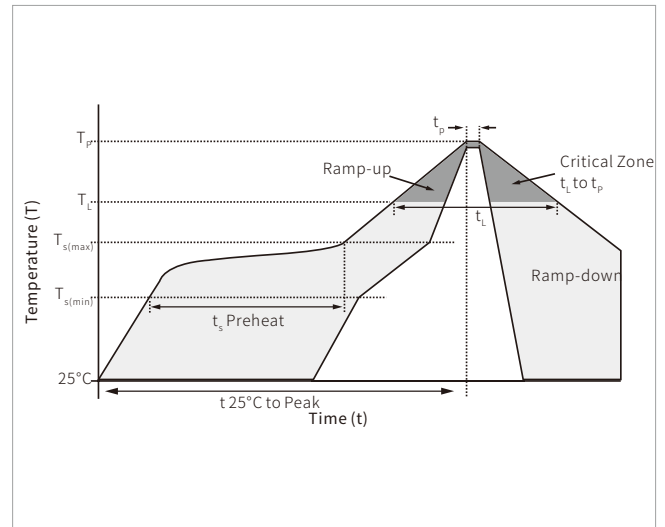


Fig.4 Typical Reverse Characteristics

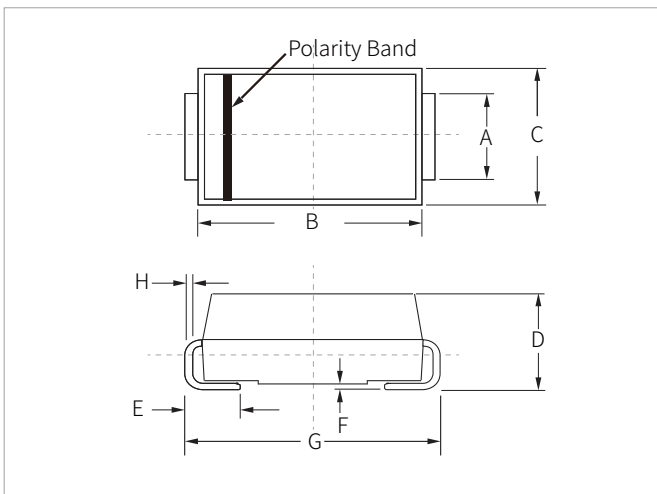


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

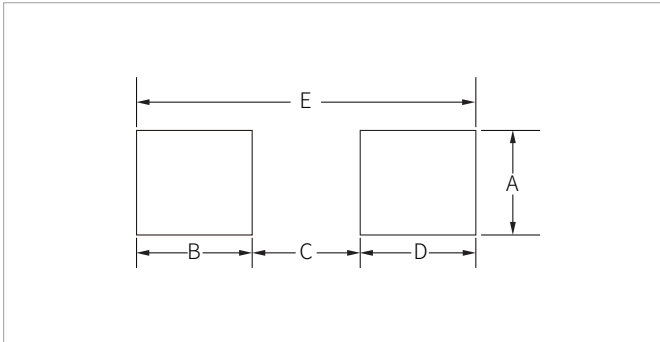


DO-214AC(SMA) PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.20	1.60	0.047	0.063
B	4.20	4.60	0.165	0.181
C	2.40	2.80	0.094	0.110
D	2.00	2.40	0.079	0.094
E	0.76	1.52	0.030	0.060
F	0.02	0.20	0.001	0.008
G	4.85	5.25	0.191	0.207
H	0.15	0.30	0.006	0.012

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.63	-	0.064	-
B	1.45	-	0.057	-
C	-	2.80	-	0.090
D	1.45	-	0.057	-
E	5.28REF		0.208REF	

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
M1~M7	DO-214AC(SMA)	7500PCS	13"

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