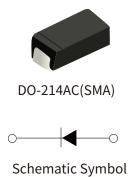


### **FEATURES**

| Glass Passivated Die Construction | Fast Recovery Time for High Efficiency | Low reverse leakage | Ideally Suited for Automatic Assembly



### **MECHANICAL DATA**

Case Material: Molded Plastic. UL Flammability Classification				
Rating 94V-0				
Moisture Sensitivity: Level 1 per J-STD-020				

## **APPROVALS**

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

# MAXIMUM RATINGS AND CHARACTERISTICS ( $T_A = 25$ °C)

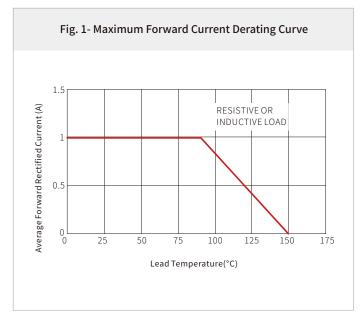
Parameter		Symbol	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	Unit
Marking			RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	
Maximum repetitive peak reverse volta	ge	$V_{_{RRM}}$	50	100	200	400	600	800	1000	
Maximum RMS voltage		$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage		V <sub>DC</sub>	50	100	200	400	600	800	1000	
Maximum average forward rectified cur	Maximum average forward rectified current		1						^	
Surge peak forward current,8.3ms single half sine-wave superimposed on rated load per diode		I <sub>FSM</sub>	30						А	
Maximum instantaneous forward voltage(Note1)@1A		V <sub>F</sub>	1.3					V		
Maximum DC reverse current	T <sub>J</sub> =25°C	-				5				Δ.
at rated DC blocking voltage	T <sub>J</sub> =125°C	I <sub>R</sub>	10						μΑ	
Maxinum reverse recovery time(Note 2)		T <sub>rr</sub>	150 250 500			00	ns			
Typical junction capacitance (Note3)		CJ	10					pF		
Typical thermal resistance		$R_{\theta JC}$	32					°C/W		
		$R_{\theta JA}$	105					°C/W		
Operating junction and storage temperature range		$T_{J},T_{STG}$	-55 to +150					°C		

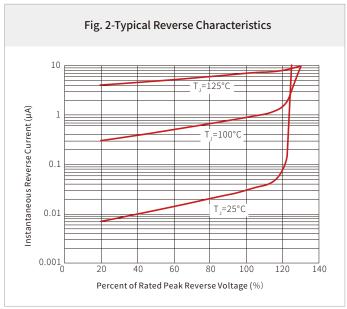
#### Note:

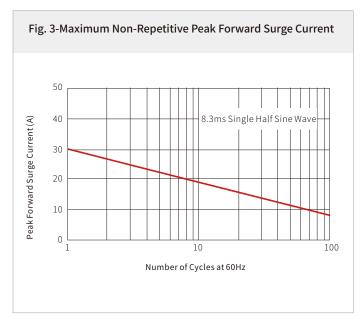
- 1.Pulse test with PW=300us,1% duty cycle
- 2. Reverse Recovery Test Conditions :  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $I_{RR} = 0.25A$
- 3.Measured at 1 MHz and Applied  $V_R$ =4.0 Volts

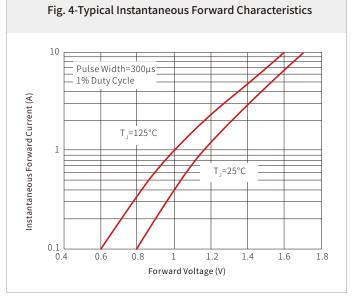


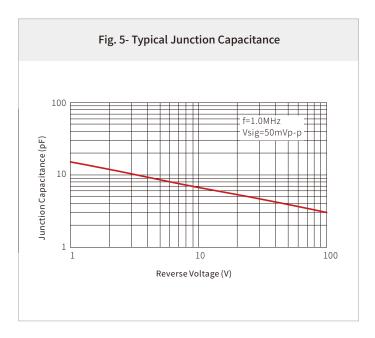
## **CHARACTERISTIC CURVES**

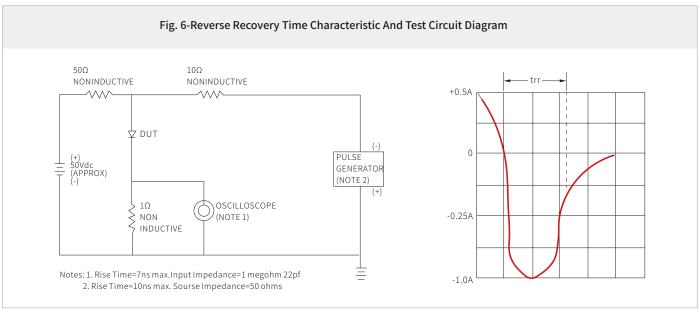








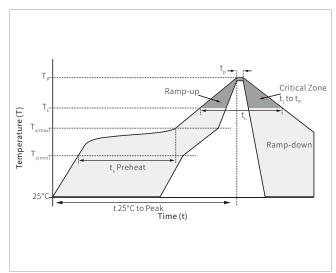




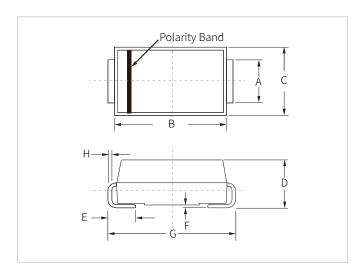


## **SOLDERING PARAMETERS**

	Lead-free assembly	
	Temperature Max (T <sub>s(min)</sub> )	150°C
Pre Heat	Temperature Max (T <sub>s(max)</sub> )	200°C
	Time (min to max) $(t_s)$	60 – 180 secs
Average ran	3°C/second max	
	3°C/second max	
Reflow	Temperature (T <sub>L</sub> ) (Liquidus)	217°C
Reliow	Time (min to max) (t <sub>L</sub> )	60 – 150 seconds
Peak Temp	260°C	
Time within	20 – 40 seconds	
Ramp-dow	6°C/second max	
Time 25°C t	8 minutes max.	
Do not exce	260°C	



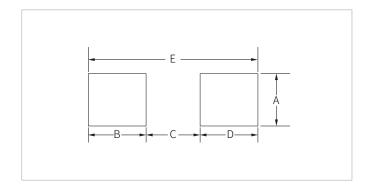
# **DO-214AC(SMA) PACKAGE INFORMATION**



Ref.	MILLIIT	ieters	inc	nes
itel.	Min.	Max.	Min.	Max.
А	1.20	1.60	0.047	0.063
В	4.20	4.60	0.165	0.181
С	2.40	2.80	0.094	0.110
D	2.00	2.40	0.079	0.094
Е	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
Н	0.15	0.30	0.006	0.012



## **RECOMMENDED PAD LAYOUT DIMENSIONS**



Ref.	Millim	neters	Inches		
	Min.	Max.	Min.	Мах.	
А	1.63	-	0.064	-	
В	1.45	-	0.057	-	
С	-	2.80	-	0.090	
D	1.45	-	0.057	-	
E	5.28	BREF	0.20	8REF	

## **ORDERING INFORMATION**

Part Number	Component Package	QTY/Reel	Reel Size
RS1A-RS1M	DO-214AC(SMA)	5000PCS	13"



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### By QR Code





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Machat

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