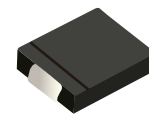
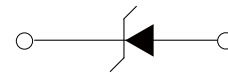


FEATURES

- | Glass passivated chip junction
- | Ideal for automated placement
- | Fast switching for high efficiency
- | High surge current capability



DO-214AB(SMC)



Schematic Symbol

APPLICATIONS

- | Switching mode power supply (SMPS)
- | Adapters
- | Lighting application
- | Converter

APPROVALS

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

MAXIMUM RATINGS AND CHARACTERISTICS (T_A=25°C)

Parameter	Symbol	RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	RS3M	Unit
Marking		RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	RS3M	
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	
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	
Maximum average forward rectified current	I _{F(AV)}	3							A
Surge peak forward current, 8.3ms single half sine-wave superimposed on rated load per diode	I _{FSM}	100							
Forward voltage per diode I _F =3A, T _J =25°C ⁽¹⁾	V _F	1.3							V
Reverse current @ rated V _r per diode ⁽²⁾	T _J =25°C	10							uA
	T _J =125°C	250							
Reverse recovery time I _F =0.5A, I _R =1.0A, I _{RR} =0.25A	T _{rr}	150				250	500	ns	
Junction-to-lead thermal resistance per diode	R _{θJL}	15							°C/W
Junction-to-ambient thermal resistance per diode	R _{θJA}	50							°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150							°C

Note :

1. Pulse test with PW=0.3 ms
2. Pulse test with PW=30 ms

CHARACTERISTIC CURVES

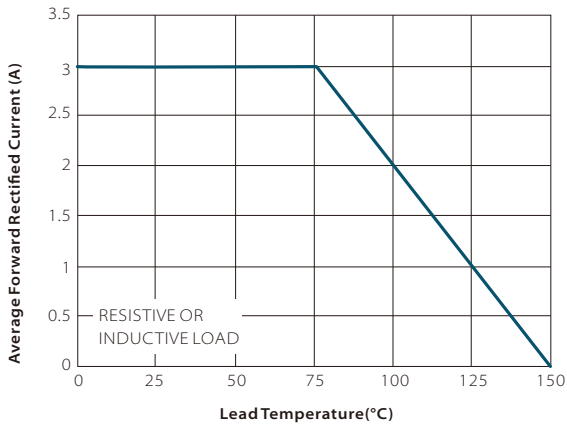
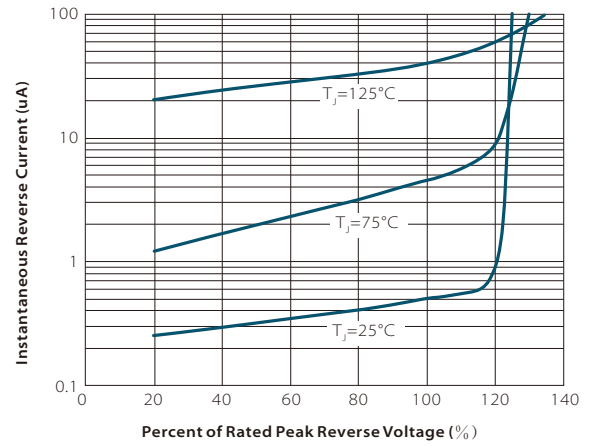
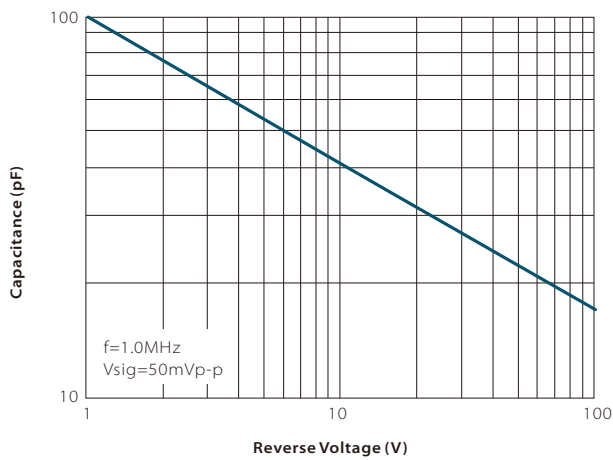
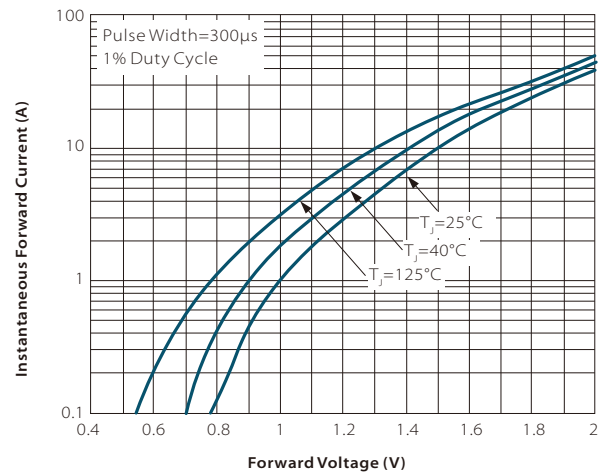
Fig. 1- Maximum Forward Current Derating Curve

Fig. 2-Typical Reverse Characteristics

Fig. 3-Typical Junction Capacitance

Fig. 4-Typical Instantaneous Forward Characteristics


Fig. 5- Maximum Non-repetitive Forward Surge Current

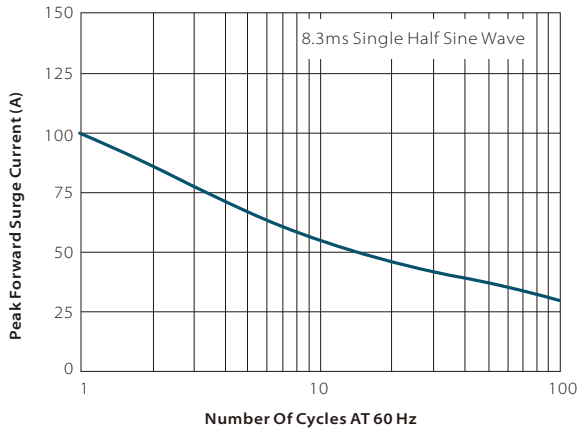
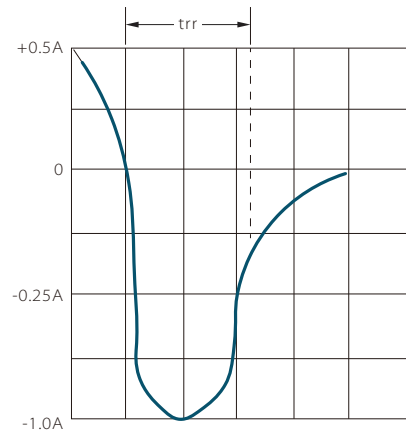
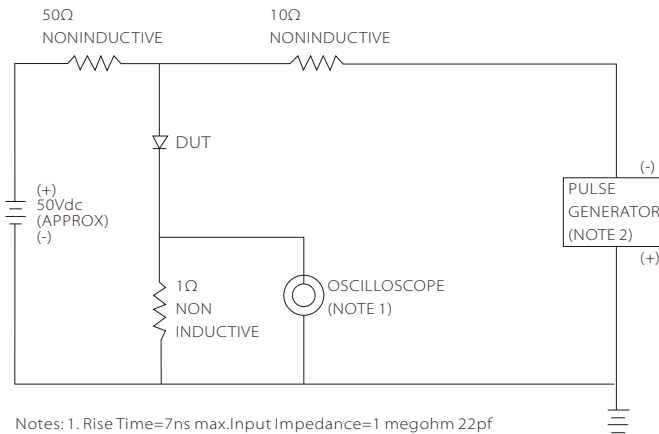
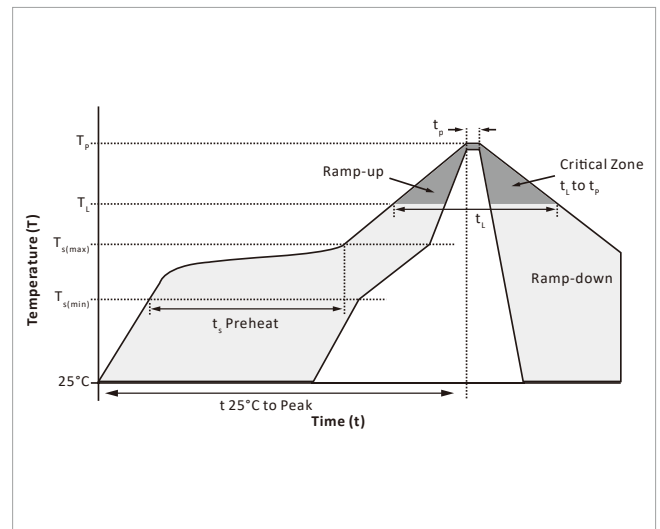


Fig. 6-Reverse Recovery Time Characteristic And Test Circuit Diagram

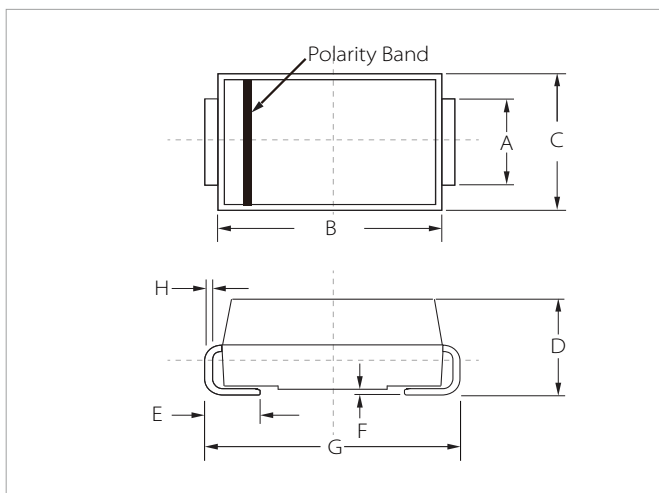


SOLDERING PARAMETERS

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_p)	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

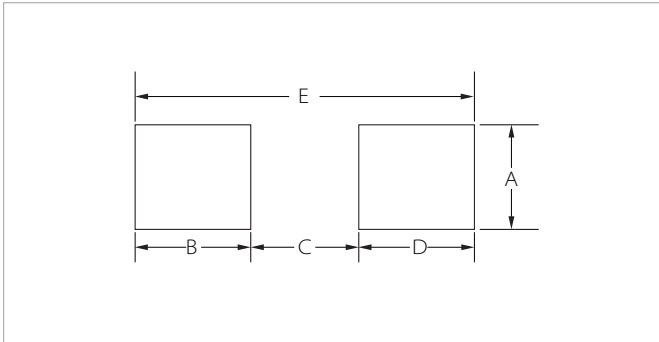


DO-214AB(SMC) PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.80	3.20	0.110	0.126
B	6.60	7.20	0.260	0.283
C	5.70	6.10	0.224	0.240
D	2.15	2.75	0.085	0.108
E	1.00	1.60	0.039	0.063
F	0.02	0.20	0.000	0.008
G	7.60	8.00	0.299	0.315
H	0.15	0.30	0.006	0.012

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	3.30	-	0.129	-
B	2.40	-	0.094	-
C	-	4.20	-	0.165
D	2.40	-	0.094	-
E	8.20REF		0.323REF	

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
RS3A-RS3M	DO-214AB(SMC)	3000PCS	13"

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