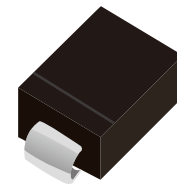


FEATURES

- | Low power loss, high efficiency
- | Ideal for automated placement
- | Glass passivated junction chip
- | Fast switching for high efficiency



DO-214AA(SMB)



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	RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	RS2M	Unit
Marking			RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	RS2M	
Repetitive peak reverse voltage		V _{RRM}	50	100	200	400	600	800	1000	V
Reverse voltage, total rms value		V _{RMS}	35	70	140	280	420	560	700	
Maximum DC blocking voltage		V _{DC}	50	100	200	400	600	800	1000	
Forward current		I _{F(AV)}	2							A
Surge peak forward current,8.3ms single half sine-wave superimposed on rated load per diode		I _{FSM}	50							
Forward voltage per diode ⁽¹⁾ I _F =2A , T _J =25°C		V _F	1.3							V
Reverse current @ rated V _R per diode ⁽²⁾	T _J =25°C	I _R	5							μA
	T _J =125°C		50							
Reverse recovery time I _F =0.5A , I _R =1.0A,I _{RR} =0.25A		T _{rr}	150				250	500		ns
Junction capacitance 1 MHz, V _R =4.0V		C _J	50							pF
Junction-to-lead thermal resistance per diode		R _{θJL}	18							°C/W
Junction-to-ambient thermal resistance per diode		R _{θJA}	55							°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- Forward Current Derating Curve

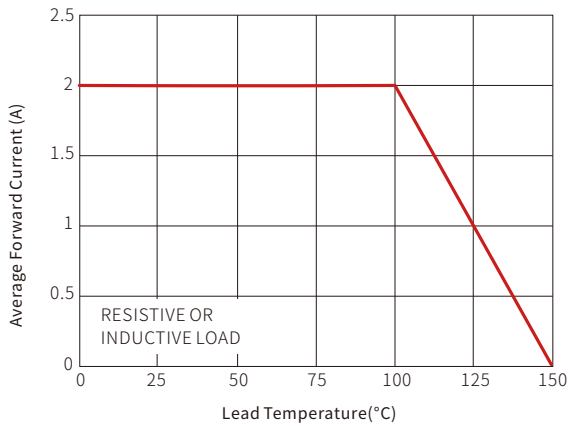


Fig. 2- Typical Reverse Characteristics

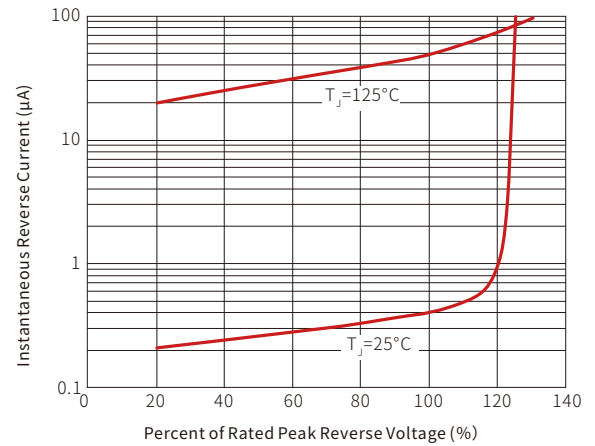


Fig. 3- Typical Junction Capacitance

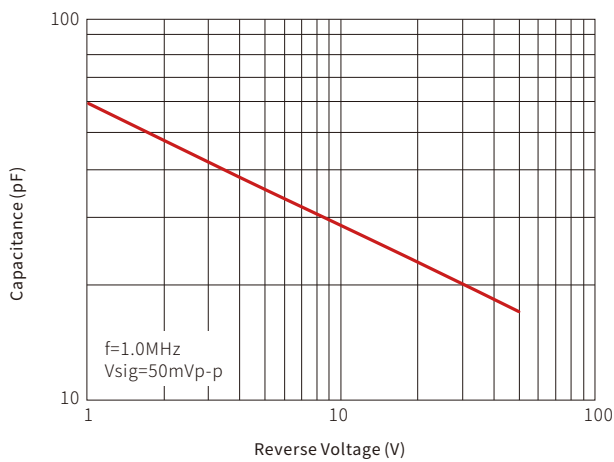


Fig. 4- Typical Forward Characteristics

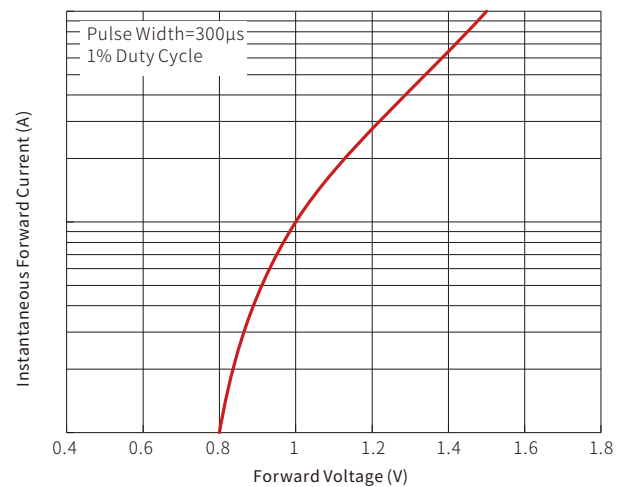
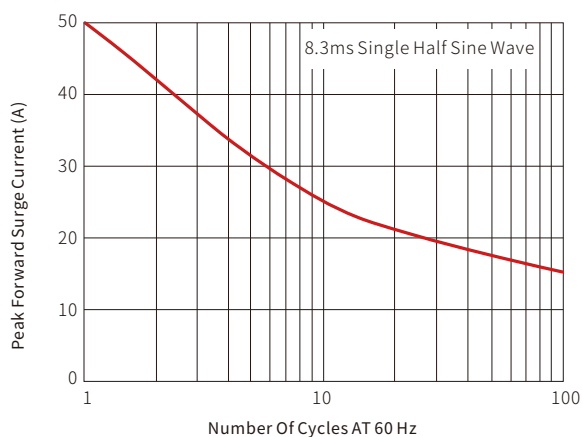
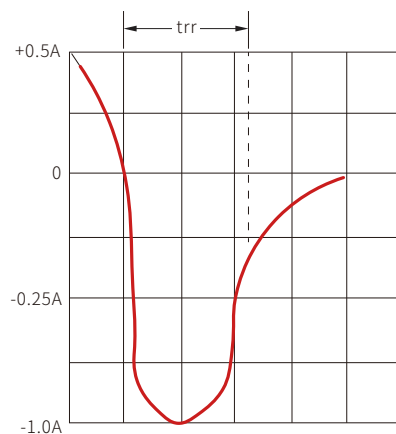
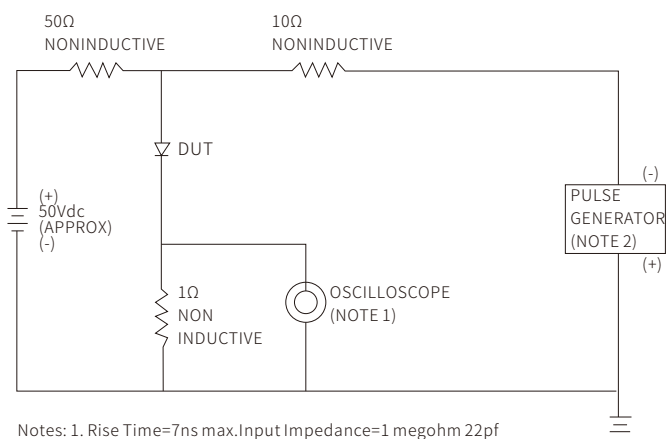
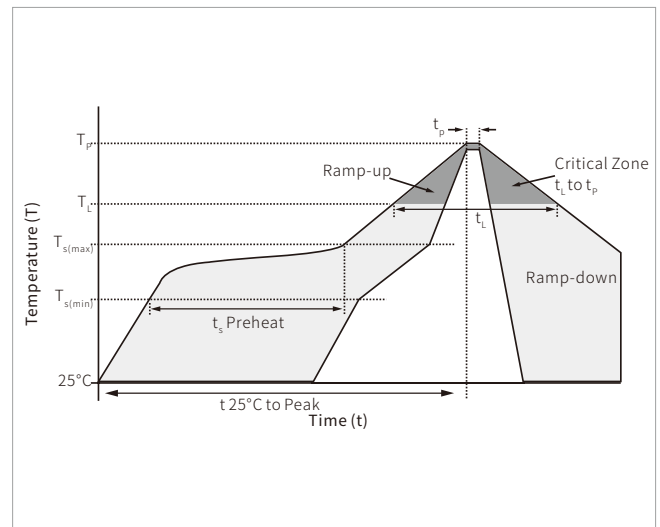


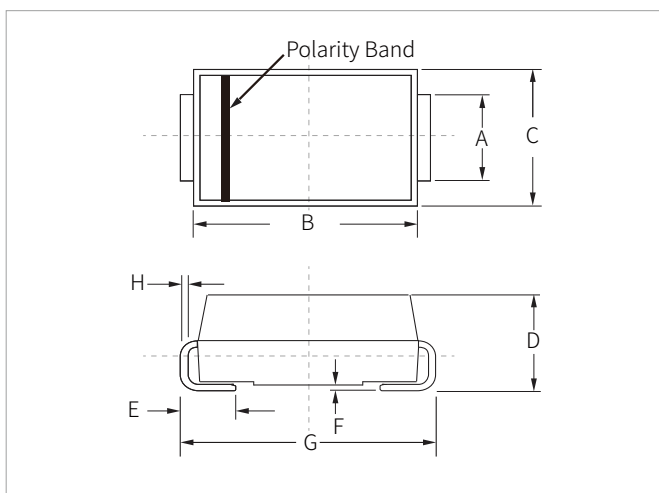
Fig. 5- Maximum Non-repetitive Forward Surge Current

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_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

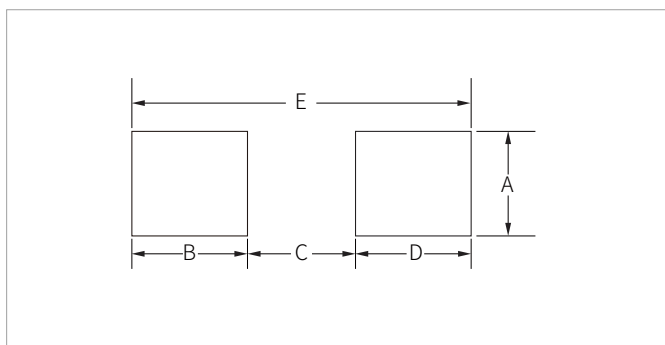


DO-214AA(SMB) PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.80	2.20	0.071	0.087
B	4.30	4.70	0.170	0.185
C	3.40	3.90	0.134	0.153
D	2.15	2.75	0.085	0.108
E	1.00	1.50	0.039	0.059
F	0.02	0.20	0.001	0.008
G	5.10	5.50	0.200	0.216
H	0.15	0.30	0.006	0.012

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.20	-	0.087	-
B	1.45	-	0.057	-
C	-	2.55	-	0.010
D	1.45	-	0.057	-
E	5.60REF		0.220REF	

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
RS2A-RS2M	DO-214AA(SMB)	3000PCS	13"

Headquarters

No.3387 Shendu Road
Pujiang I&E Park
Minhang Shanghai China
201000

Hotline

400-021-5756

Web

<https://www.semiware.com>

Sales Center

Tel: 86-21-3463-7458
Email: sales18@semiware.com

Customer Service

Tel: 86-21-5484-1001
Email: sales17@semiware.com

Technical Support

Tel: 86-21-3463-7654
Email: fae01@semiware.com

Complaint & Suggestions

Tel: 86-21-3463-7172
Ext: 8868
Email: cs03@semiware.com

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