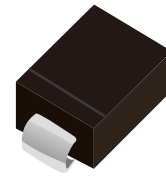


FEATURES

- | Glass passivated chip junction
- | Ideal for automated placement
- | Low forward voltage drop
- | High surge current capability



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	GS3AB	GS3BB	GS3DB	GS3GB	GS3JB	GS3KB	GS3MB	Unit
Marking		GS3AB	GS3BB	GS3DB	GS3GB	GS3JB	GS3KB	GS3MB	
Maximum repetitive peak reverse voltage	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 _{DC}	50	100	200	400	600	800	1000	
Forward current	I _{F(AV)}	3							A
Surge peak forward current, 8.3ms single half sine-wave superimposed on rated load per diode	I _{FSM}	80							
Forward voltage per diode I _F =3A, T _J = 25°C ⁽¹⁾	V _F	1.15							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}	1500							ns
Junction capacitance, 1 MHz, V _R =4.0V	C _J	40							pF
Typical thermal resistance	R _{θJL}	10							°C/W
Junction temperature	T _J	-55 to +150							°C
Storage temperature	T _{STG}	-55 to +150							°C

Notes:

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

CHARACTERISTIC CURVES

Fig. 1- Forward Current Derating Curve

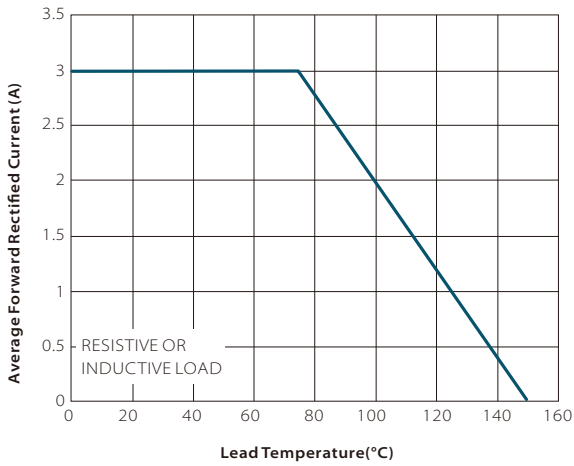


Fig. 2-Typical Reverse Characteristics

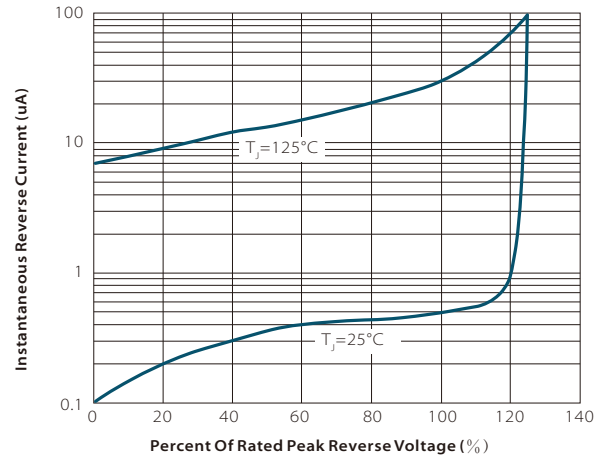


Fig. 3-Typical Junction Capacitance

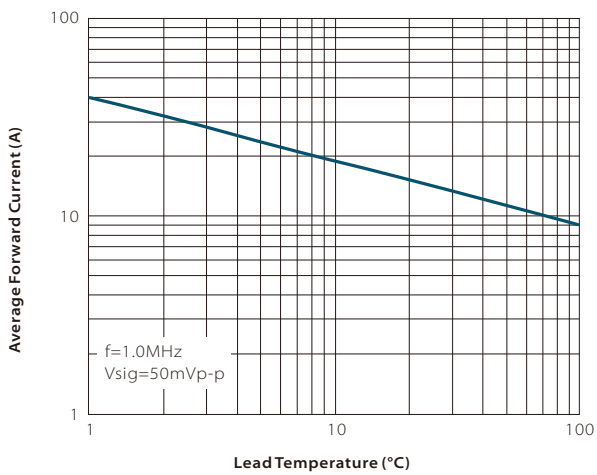


Fig. 4-Typical Forward Characteristics

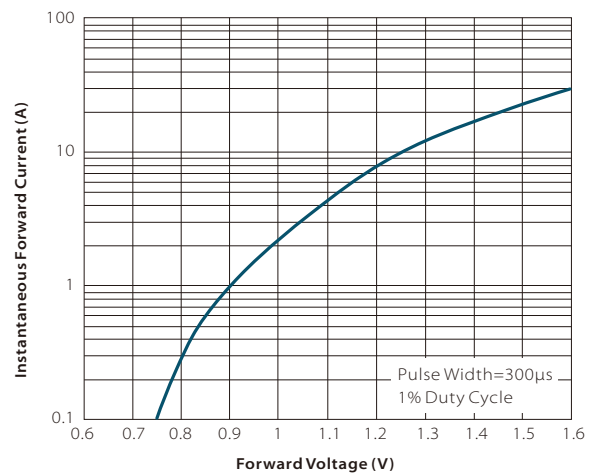


Fig. 5- Maximum Non-repetitive Forward Surge Current

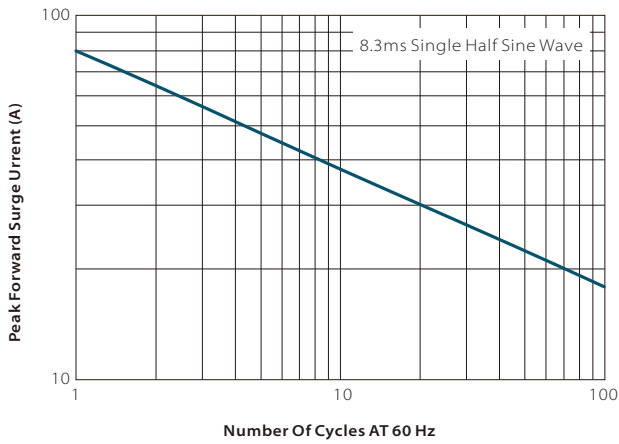
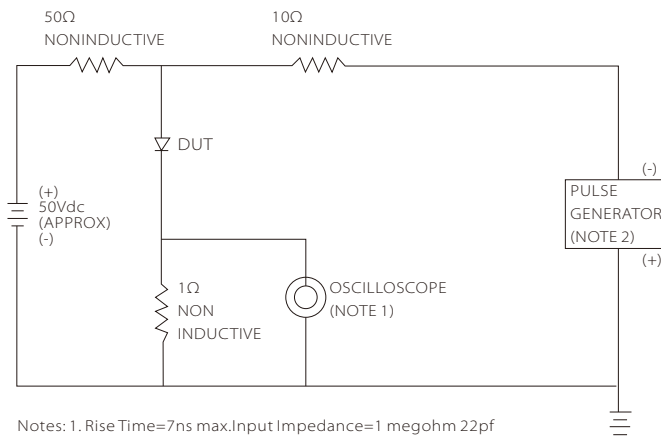
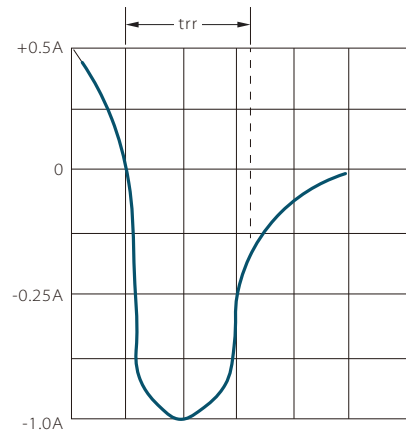


Fig. 6-Reverse Recovery Time Characteristic And Test Circuit Diagram

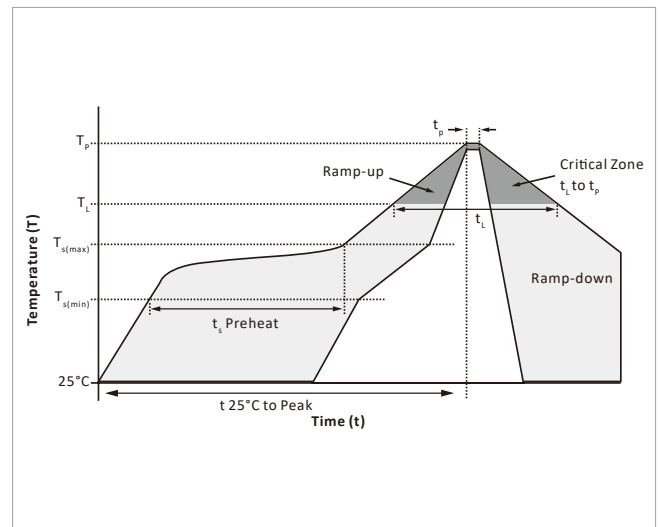


Notes: 1. Rise Time=7ns max.Input Impedance=1 megohm 22pf
2. Rise Time=10ns max. Source Impedance=50 ohms

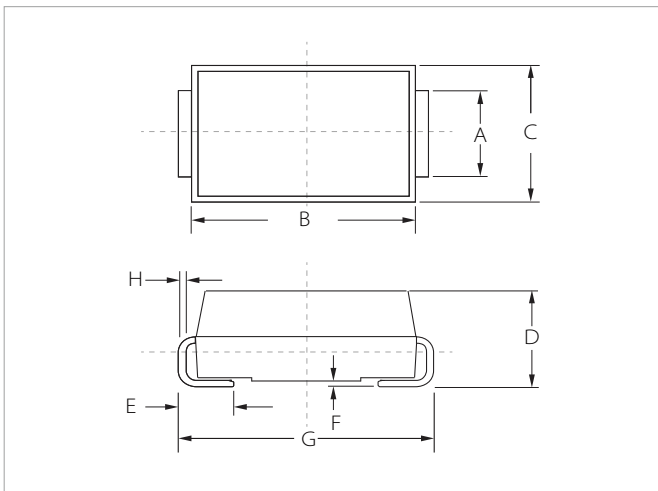


SOLDERING PARAMETERS

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

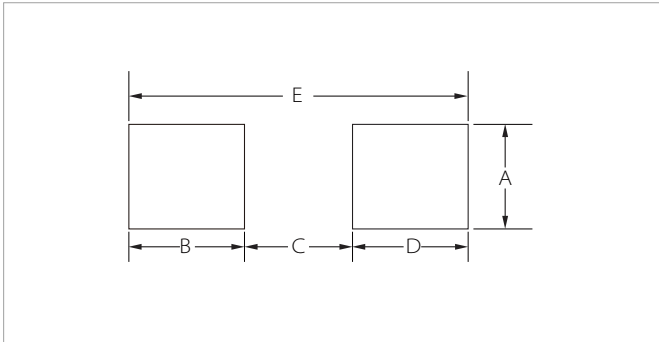


DO-214AA(SMB) PACKAGE INFORMATION



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	2.55	0.085	0.100
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
GS3AB-GS3MB	DO-214AA(SMB)	3000PCS	13"

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