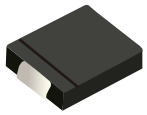
FEATURES

- 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	GS5A	GS5B	GS5D	GS5G	GS5J	GS5K	GS5M	Unit
Marking			GS5A	GS5B	GS5D	GS5G	GS5J	GS5K	GS5M	
Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Reverse Voltage, Total Rms Value		$V_{R(RMS)}$	35	70	140	280	420	560	700	
Maximum Dc Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	
Forward Current		$I_{F(AV)}$	5							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=5a,t_j=25°c[1]		V_F	1.15							V
Reverse Current @ Rated V_r Per Diode[2]	T_J=25°C	I_R	10							μA
	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-to-lead Thermal Resistance Per Diode		$R_{\theta JL}$	13							°C/W
Junction-to-ambient Thermal Resistance Per Diode		$R_{\theta JA}$	47							°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

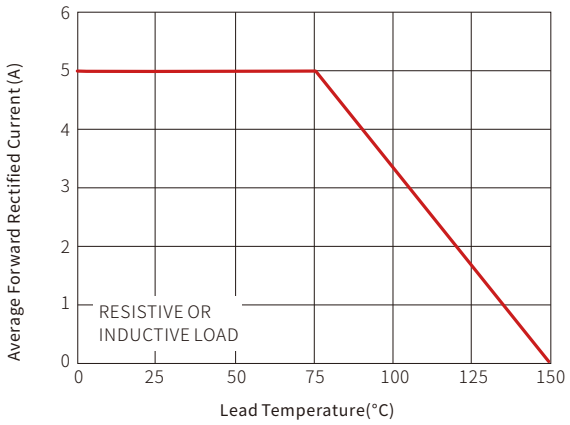


Fig. 2-Typical Reverse Characteristics

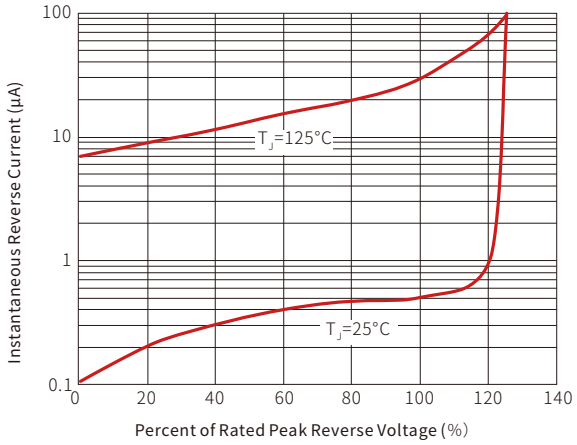


Fig. 3-Typical Junction Capacitance

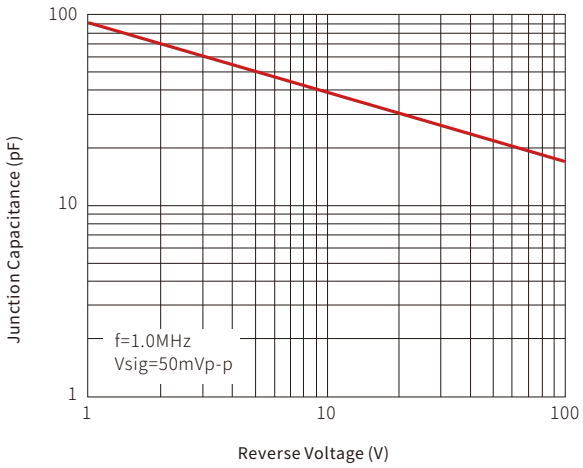


Fig. 4-Typical Forward Characteristics

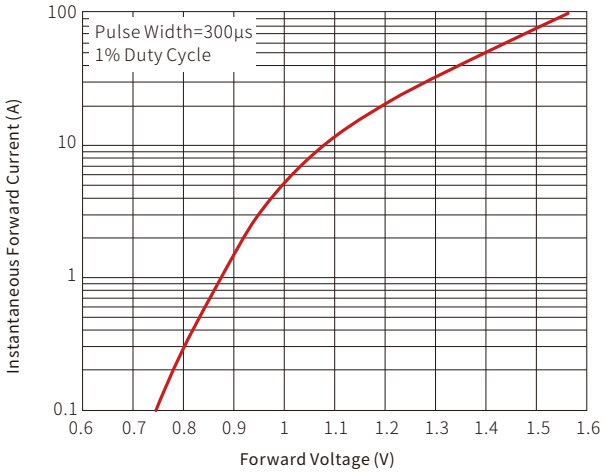


Fig. 5- Maximum Non-repetitive Forward Surge Current

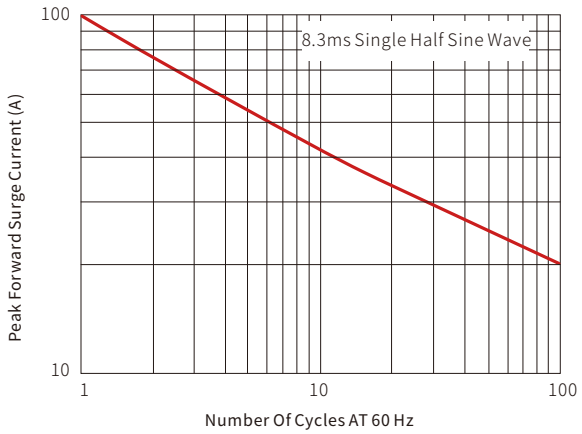
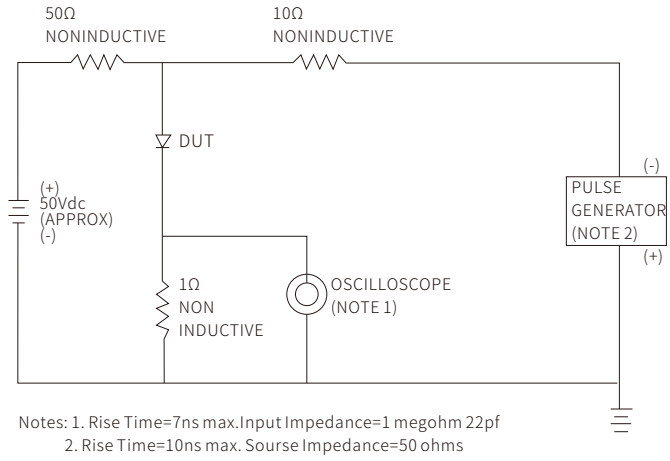
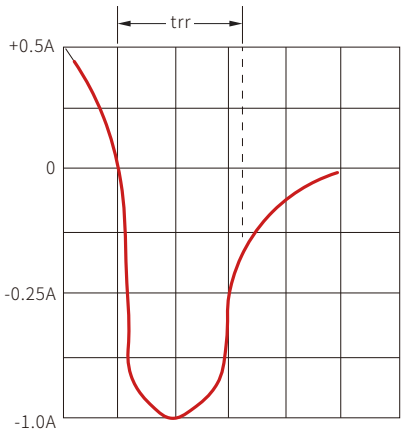


Fig. 6-Reverse Recovery Time Characteristic And Test Circuit Diagram

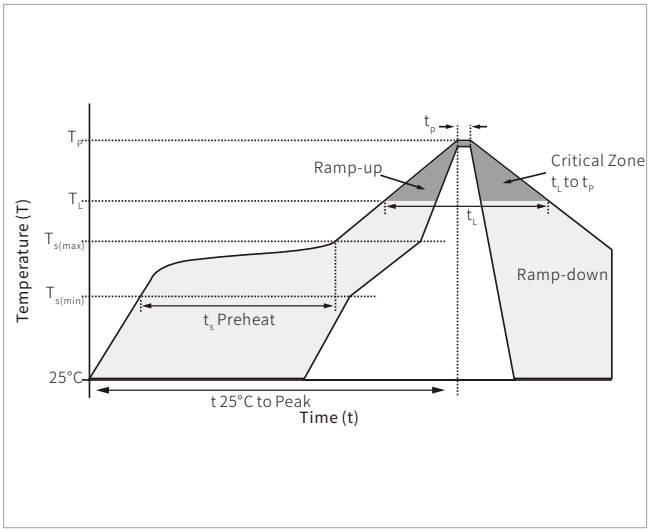


Notes: 1. Rise Time=7ns max.Input Impedance=1 megohm 22pf
2. Rise Time=10ns max. Sourse Impedance=50 ohms

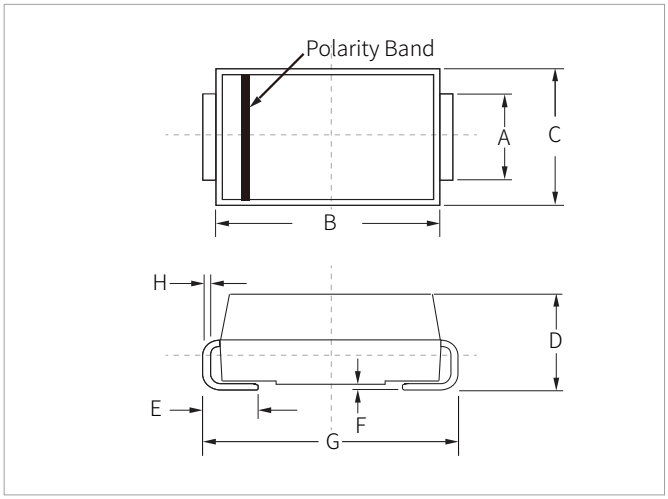


SOLDERING PARAMETERS

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_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

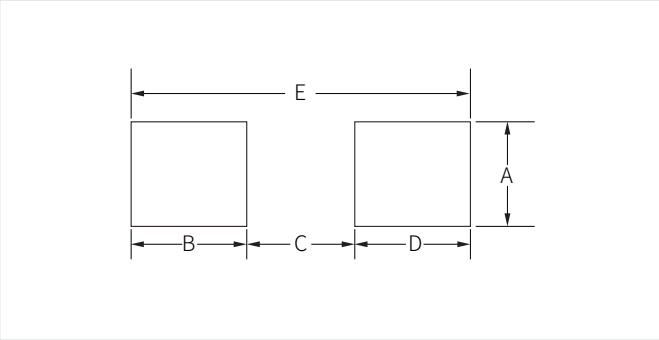


DO-214AB(SMC) PACKAGE INFORMATION



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
GS5A -GS5M	DO-214AB(SMC)	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

By QR Code
Website
Wechat

To find your local partner within Semiware' s global website: www.semiware.com