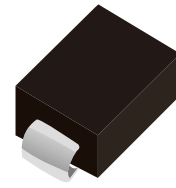
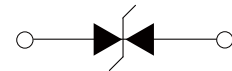


DESCRIPTION

- | Fast Response Time: Typically < 1ns
- | Excellent Clamping Capability
- | Glass Passivated Junction
- | Built-in Strain relief
- | Low inductance
- | IEC 61000-4-2 (ESD) $\pm 30\text{kV}(\text{air})$, $\pm 30\text{kV}(\text{contact})$



DO-214AA(SMB)



Schematic Symbol

FEATURES

- | I/O Interfaces
- | Power lines
- | Telecommunication
- | Computers & Consumer Electronics
- | Industrial Electronics

APPROVALS

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

MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation on 10/1000us waveform (Note1, Note2).	P_{PPM}	2000	Watts
Non-repetitive peak impulse Voltage 10/700 μs (ITU-T K.20, K.21 & K.45, K.44)	V_{PPSM}	4000	V
Steady State Power Dissipation at $T_L=50^\circ\text{C}$ (Fig4)).	P_D	6.5	W

Notes :1.Non-repetitive current pulse, $T_A=25^\circ\text{C}$.
 2.Mounted on 5.0mm*5.0mm (0.03mm thick) Copper Pads to each terminal.

THERMAL CONSIDERATIONS

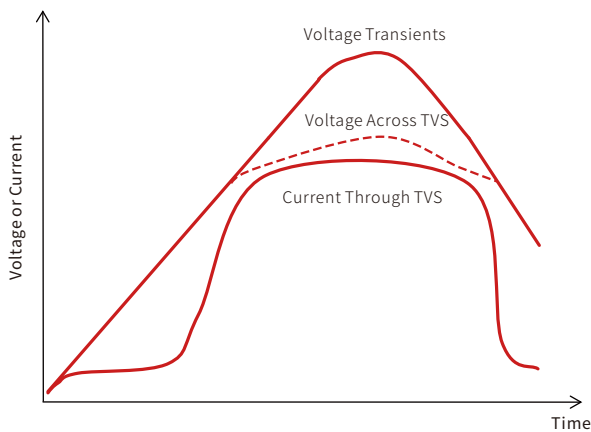
Parameter	Symbol	Value	Unit
Junction Temperature range	T_J	-65 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$
Operating Temperature range	T_{OP}	-65 to +150	$^\circ\text{C}$
Junction to Ambient on printed circuit	$R_{\theta JA}$	90	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS (T_A=25°C)

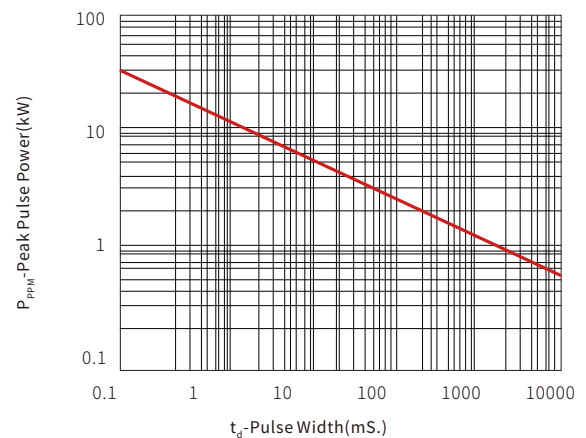
Part Number	Device Marking Code	Reverse Stand-off Voltage	Breakdown Voltage Min.@I _T	Breakdown Voltage Max.@I _T	Test Current	V _C @10/700μs 4KV Max.	V _C @10/1000μs Max.	Clamping Voltage 10/1000μs	Reverse Leakage @V _{RWM}
		V _{RWM} (V)	V _{BR} (V)	V _{BR} (V)	I _T (mA)	V _C (V)	V _C (V)	I _{PP} (A)	I _R (μA)
SVB200B58-SP	CGG	58.0	62.0	71.2	1.0	90.0	93.6	22.0	1.0

CHARACTERISTIC CURVES

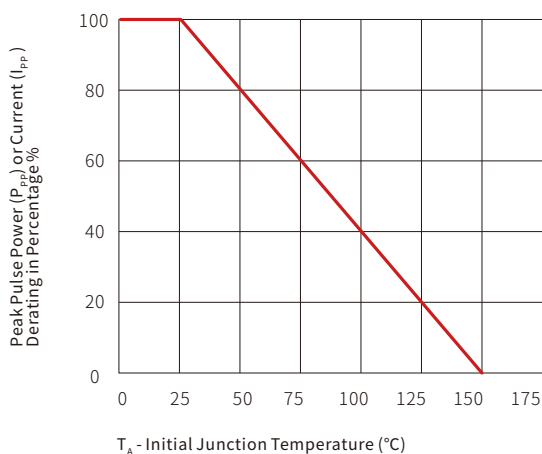
TVS Transients Clamping Waveform



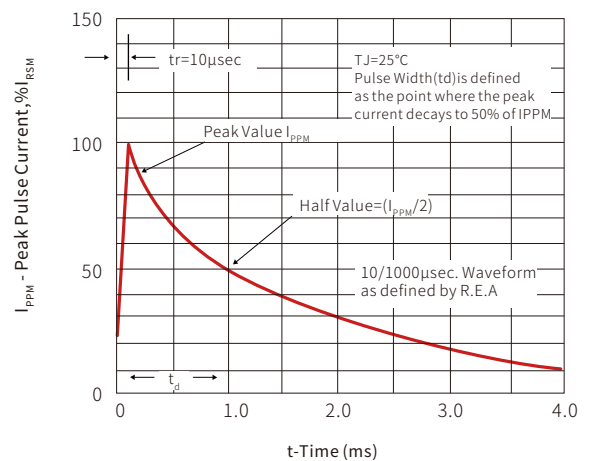
Peak Pulse Power Rating Curve



Pulse Derating Curve

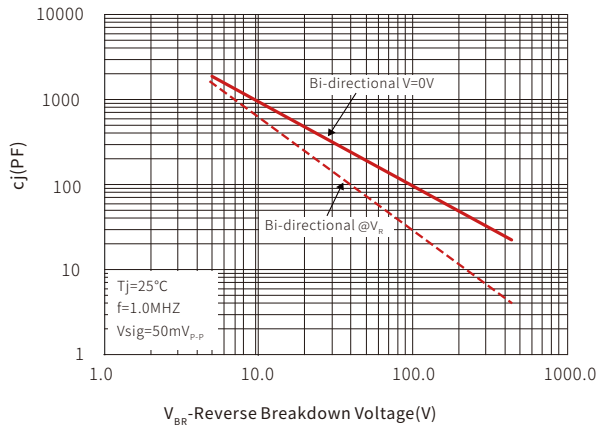


Pulse Waveform

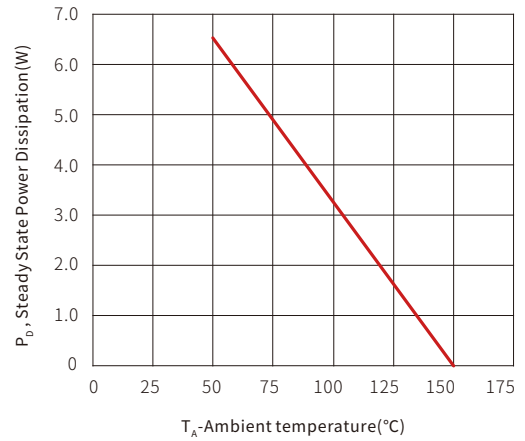




Typical Junction Capacitance

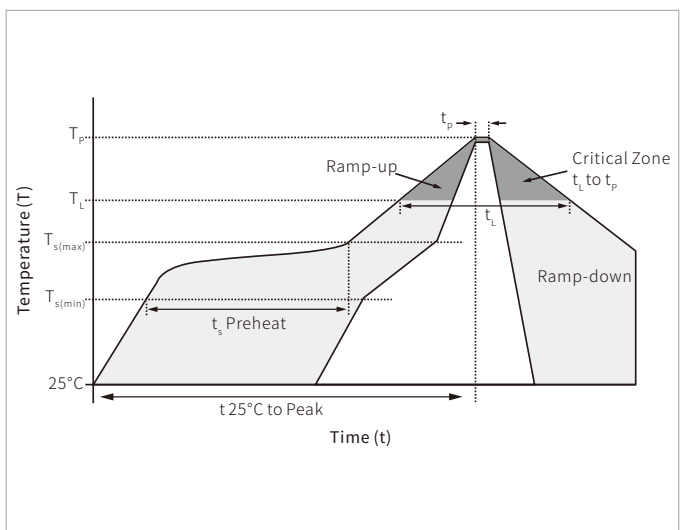


Steady State Power Dissipation Derating Curve

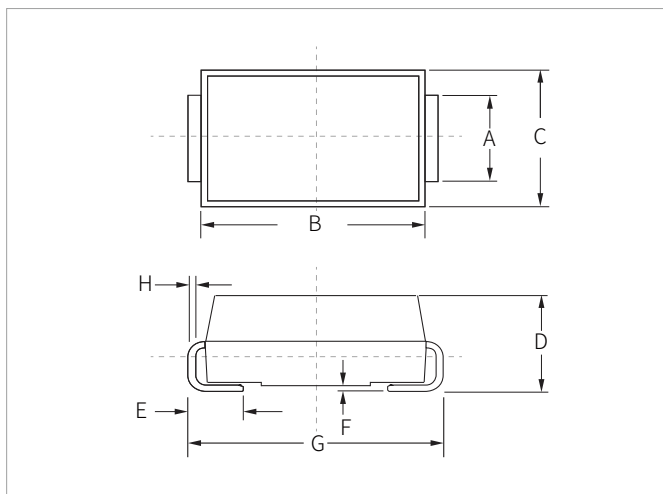


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150 $^\circ C$
	Temperature Max ($T_{s(max)}$)	200 $^\circ C$
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3 $^\circ C$ /second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3 $^\circ C$ /second max
Reflow	Temperature (T_L) (Liquidus)	217 $^\circ C$
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260 $^\circ C$
Time within 5 $^\circ C$ of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6 $^\circ C$ /second max
Time 25 $^\circ C$ to peak Temperature (T_p)		8 minutes max.
Do not exceed		260 $^\circ C$

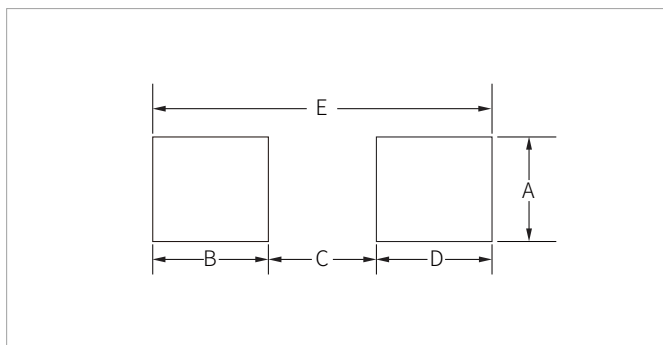


PACKAGE INFORMATION



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
SVB200B58-SP	DO-214AA(SMB)	3000PCS	13"

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By QR Code

Website



Wechat

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