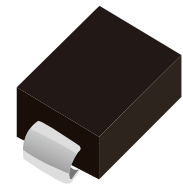


FEATURES

- | Excellent capability of absorbing transient surge
- | Quick response to surge voltage
- | Eliminates over voltage caused by fast rising transients
- | Solid-state silicon technology, non degenerative



SMB(DO-214AA)



Schematic Symbol

APPLICATIONS

- | Audio/Video line
- | Network and telecom
- | Data lines and security systems
- | Serial ports

APPROVALS

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

ELECTRICAL CHARACTERISTICS

Part Number	Marking	V_{DRM}	V_S	V_T	I_{DRM}	I_S	I_T	I_H	C_o
		Min. (V)	Max. (V)	Max. (V)	Max. (μ A)	mA	Max. (A)	Min. (mA)	Typ.(pF)
P0060SC	P006C	6	15	4	5	800	2.2	50	80
P0080SC	P008C	6	25	4	5	800	2.2	50	80
P0150SC	P015C	15	25	4	5	800	2.2	50	80
P0300SC	P03C	25	40	4	5	800	2.2	50	80
P0640SC	P06C	58	77	4	5	800	2.2	120	80
P0720SC	P07C	65	88	4	5	800	2.2	120	80
P0900SC	P09C	75	98	4	5	800	2.2	120	80
P1100SC	P11C	90	130	4	5	800	2.2	120	80
P1300SC	P13C	120	160	4	5	800	2.2	120	80
P1500SC	P15C	140	180	4	5	800	2.2	120	80
P1800SC	P18C	170	220	4	5	800	2.2	120	80
P2300SC	P23C	190	260	4	5	800	2.2	120	80
P2600SC	P26C	220	300	4	5	800	2.2	120	80
P3100SC	P31C	275	350	4	5	800	2.2	120	40
P3500SC	P35C	320	400	4	5	800	2.2	120	40
P4200SC	P42C	400	520	4	5	800	2.2	≤ 50	70

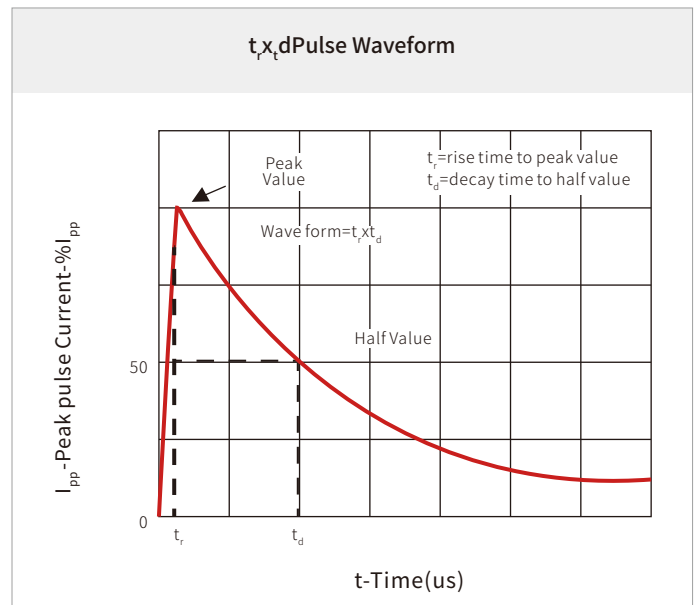
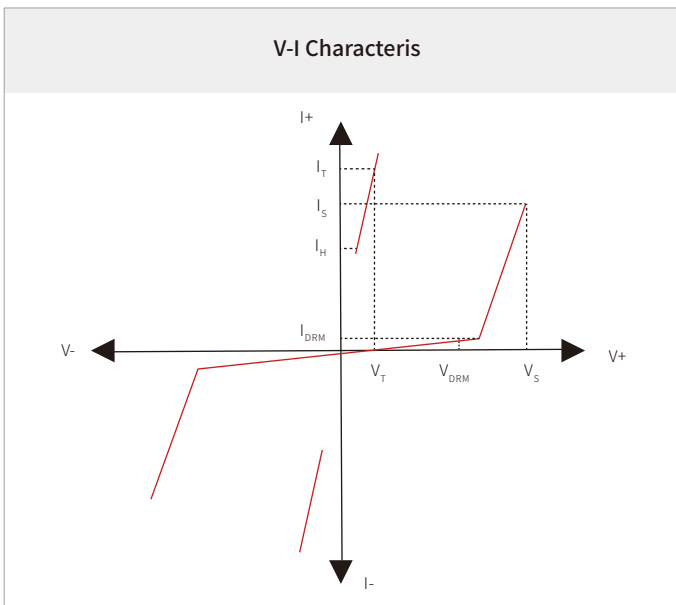
SURGE RATINGS

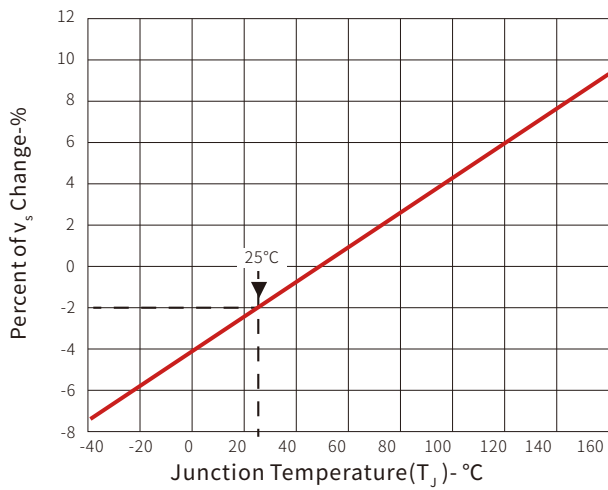
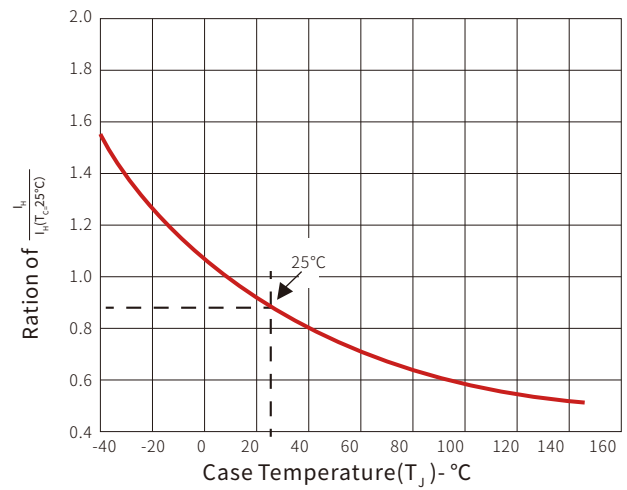
Part Number	I_{PP} 2x10us	I_{PP} 8x20us	I_{PP} 10x560us	I_{PP} 10x1000us	V_{PP} 10x700us	I_{TSM} 60Hz	d_i/d_t
	(A)	(A)	(A)	(A)	(V)	(A)	(A/us)
P0060SC Thru P4200SC	500	400	150	100	6000	30	500

THERMAL CONSIDERATIONS

Symbol	Parameter	Value	Unit
$R_{\theta JA}$	Junction to Ambient on printed circuit	90	°C/W
T_J	Operating Junction Temperature	-55 to +125	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

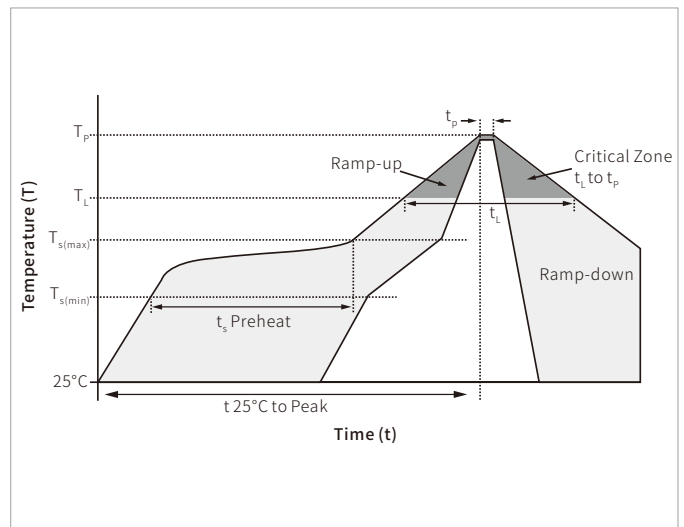
RATINGS AND CHARACTERISTIC CURVES ($T_A=25^\circ\text{C}$)



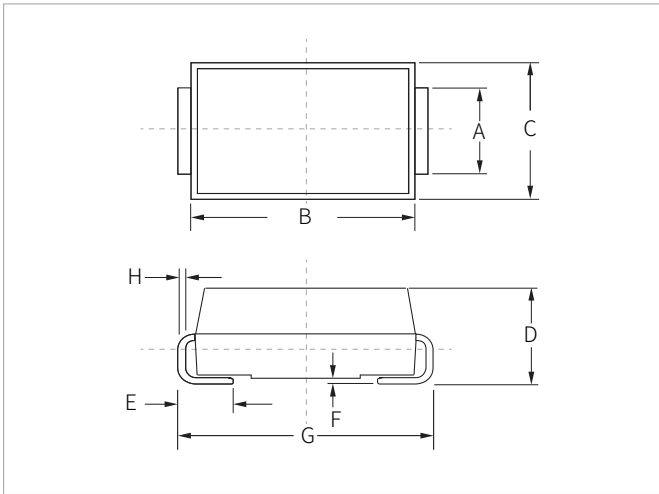
Normalized VSChange vs. Junction Temperature

Normalized DC Holding Current vs. Case Temperature


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

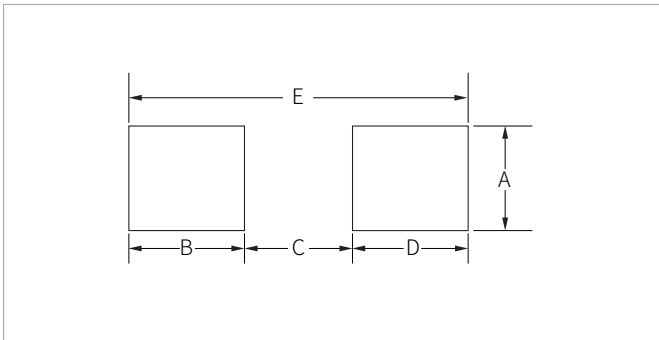


DO-214AA(SMB) PACKAGE INFORMATION



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
PxxxxSC	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

By QR Code

Website



Wechat

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

© 2022 Semiware Semiconductor Inc.

The content of this document has been carefully checked and understood. However, neither Semiware nor its subsidiaries assume any liability whatsoever for any errors or inaccuracies of this document and the consequences thereof. Published specifications are subject to change without notice. Product suitability for any area of application must ultimately be determined by the customer. In all cases, products must never be operated outside their published specifications. Semiware does not guarantee the availability of all published products. This disclaimer shall be governed by substantive Chinese law and resulting disputes shall be settled by the courts at the place of business of Semiware. Latest publications and a complete disclaimer can be downloaded from the Semiware website. All trademarks recognized.