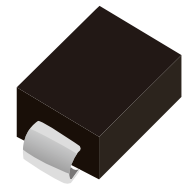
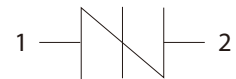


## FEATURES

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



SMB(DO-214AA)



Schematic Symbol

## APPLICATIONS

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

## APPROVALS

<b>RoHS</b>	Compliance with 2011/65/EU
<b>HF</b>	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. ( $\mu$ 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	$\leq$ 50	70

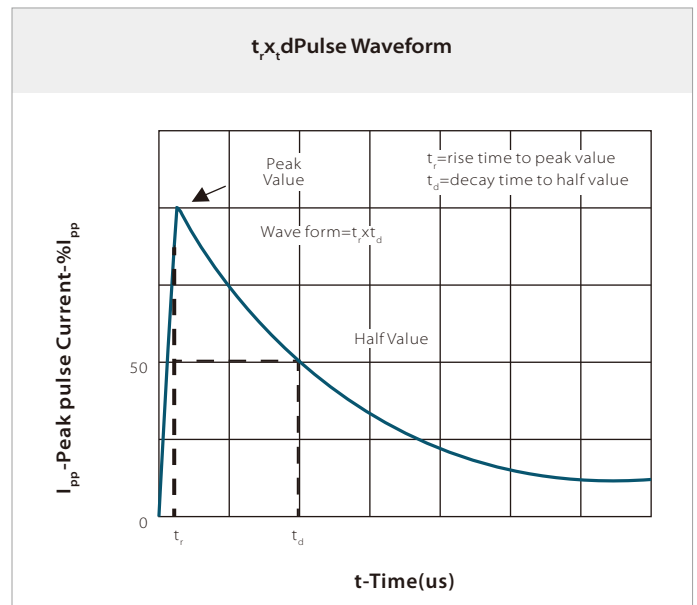
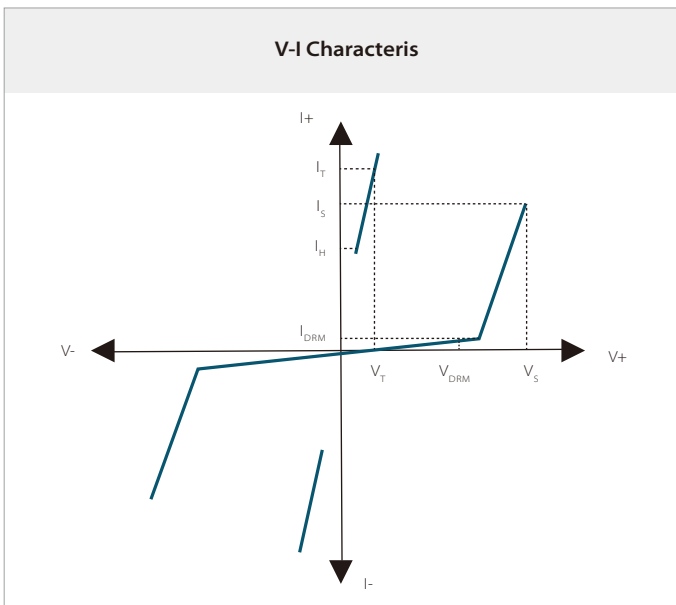
## SURGE RATINGS

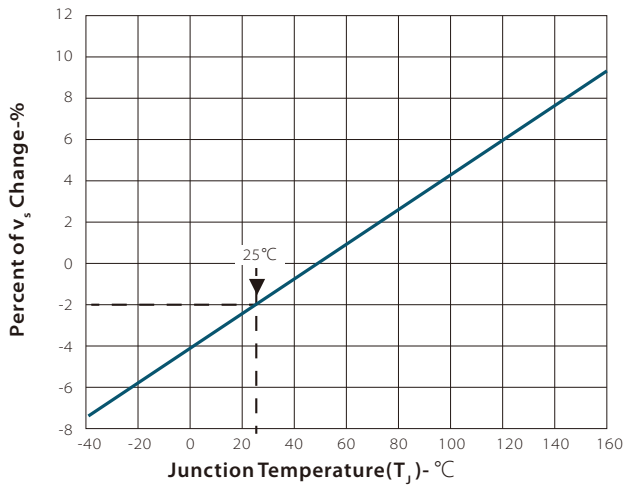
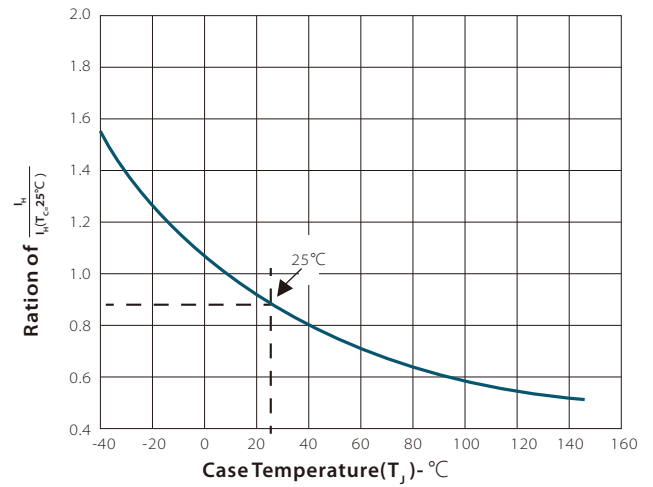
Part Number	$I_{PP}$ 2x10us	$I_{PP}$ 8x20us	$I_{PP}$ 10x560us	$I_{PP}$ 10x1000us	$V_{PP}$ 10x700us	$I_{TSM}$ 60Hz	$d_i/d_t$
	(A)	(A)	(A)	(A)	(V)	(A)	(A/us)
P0060SC Thru P4200SC	500	400	150	100	6000	30	500

## 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 +150	°C
$T_{STG}$	Storage Temperature Range	-55 to +150	°C

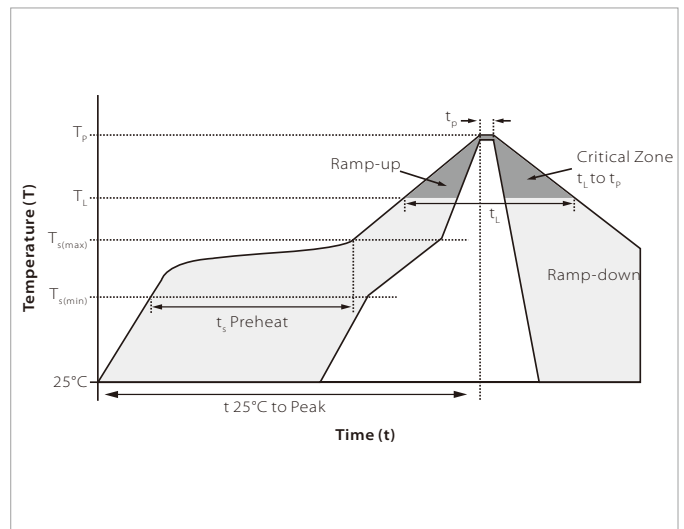
## RATINGS AND CHARACTERISTIC CURVES ( $T_A=25^\circ\text{C}$ )



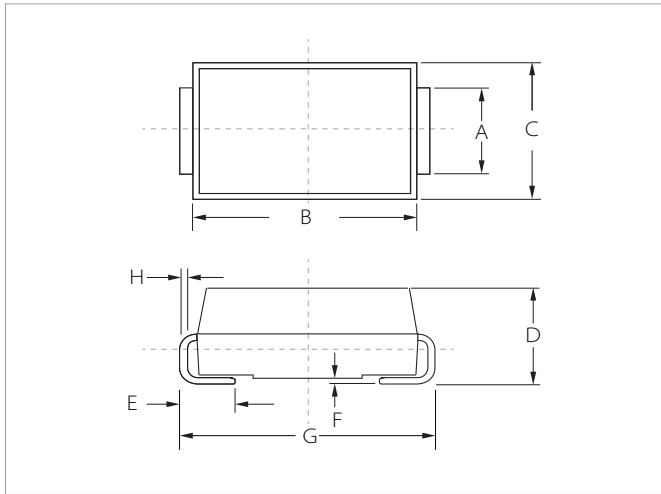
**Normalized VSChange vs. Junction Temperature**

**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) ( $t_r$ )	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

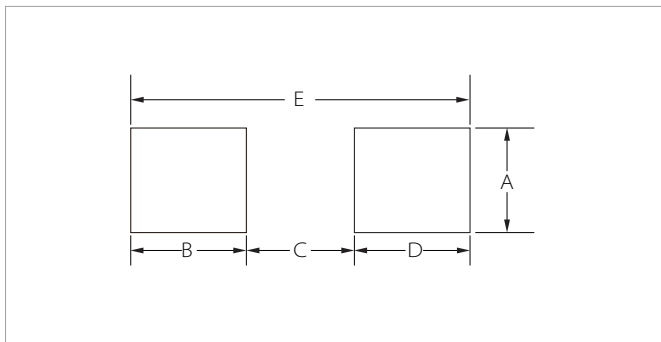


## DO-214AA(SMB) PACKAGE INFORMATION



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
PxxxxSC	DO-214AA(SMB)	3000PCS	13"

To find your local partner within Semiwell's website : [www.semiwell.com.cn](http://www.semiwell.com.cn)

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