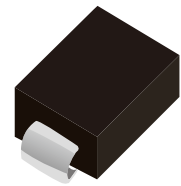


FEATURES

- | 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)
P0080SD	P008D	6	15	4	1	800	2.2	50	150
P0640SD	P06D	58	77	4	1	800	2.2	50	150
P0720SD	P07D	65	87	4	1	800	2.2	50	150
P0900SD	P09D	75	98	4	1	800	2.2	50	140
P1100SD	P11D	90	130	4	1	800	2.2	50	110
P1300SD	P13D	120	160	4	1	800	2.2	50	100
P1500SD	P15D	140	180	4	1	800	2.2	50	90
P1800SD	P18D	170	220	4	1	800	2.2	50	90
P2300SD	P23D	190	260	4	1	800	2.2	50	80
P2600SD	P26D	220	300	4	1	800	2.2	50	70
P3100SD	P31D	275	350	4	1	800	2.2	50	60
P3500SD	P35D	320	400	4	1	800	2.2	50	60

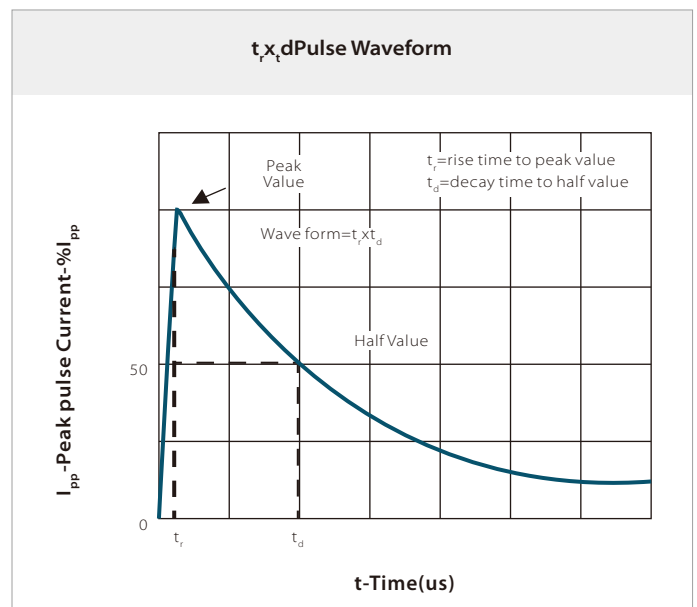
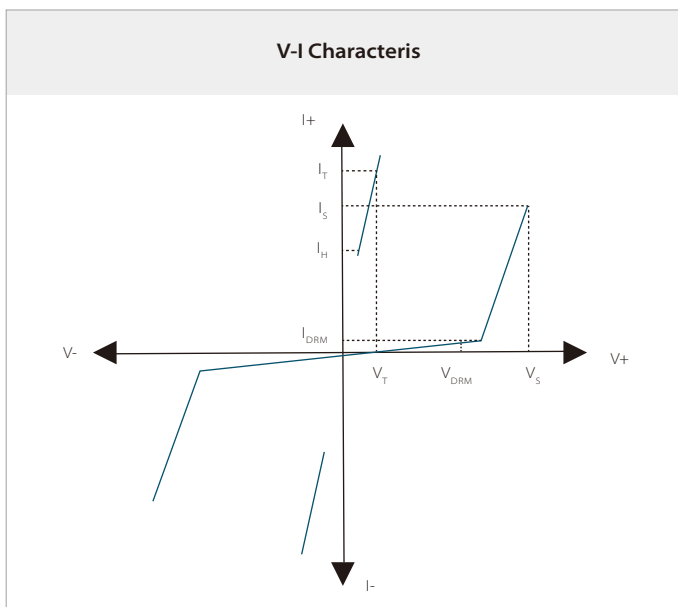
SURGE RATINGS

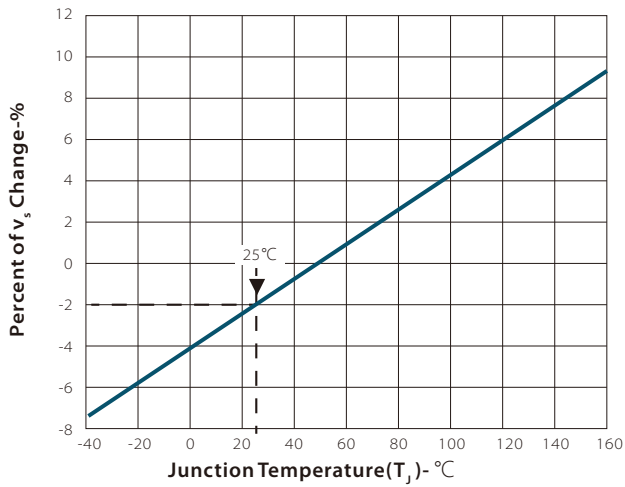
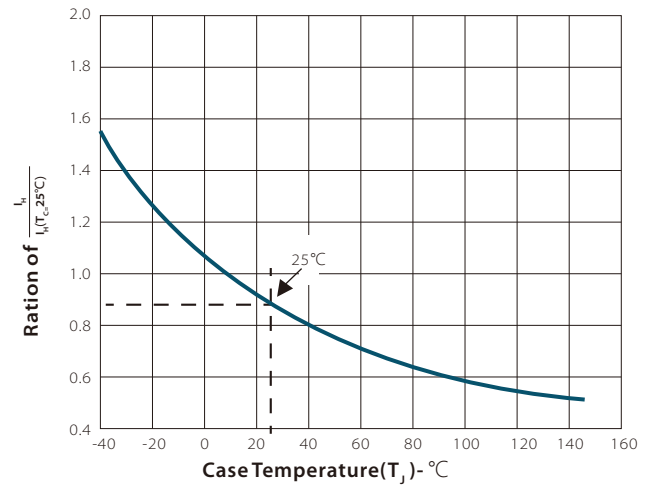
Part Number	I_{PP} 2x10us	I_{PP} 8x20us	I_{PP} 10x560us	I_{PP} 10x1000us	V_{PP} 10x700us	I_{TSM} 50/60Hz	d_i/d_t
	(A)	(A)	(A)	(A)	(V)	(A)	(A/us)
P0080SD-P3500SD	800	700	200	130	8000	40	500

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

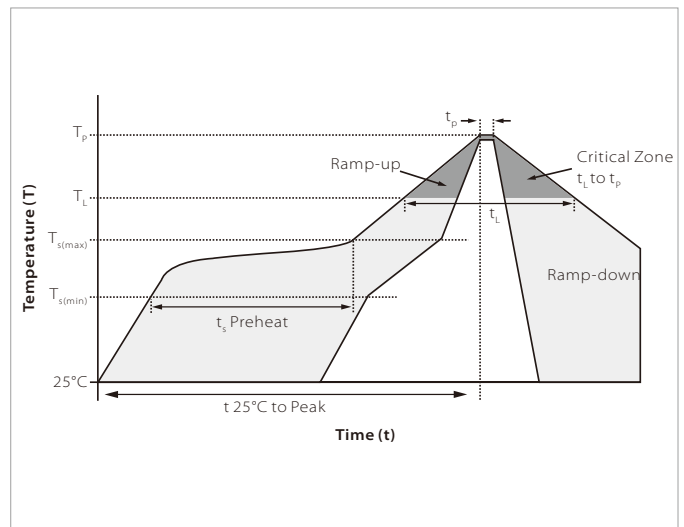
RATINGS AND CHARACTERISTIC CURVES ($T_A=25^\circ\text{C}$)



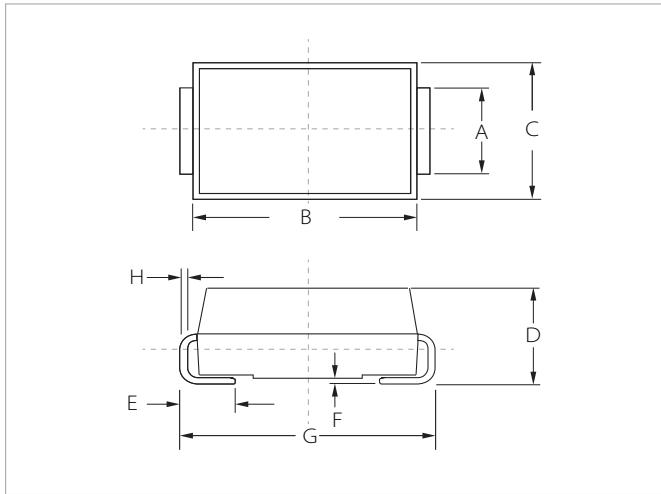
Normalized VSChange vs. Junction Temperature

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_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

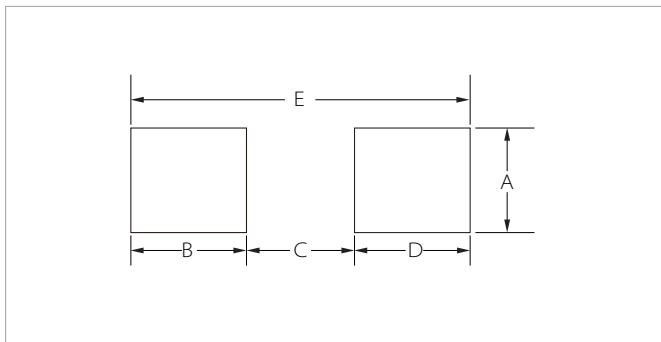


DO-214AA(SMB) PACKAGE INFORMATION



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

To find your local partner within Semiwell's website : www.semiwell.com.cn

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