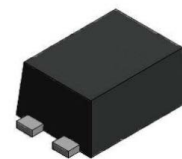


FEATURES

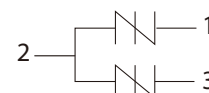
- Excellent capability of absorbing transient surge
- Quick response to surge voltage (nS Level)
- Eliminates overvoltage caused by fast rising transients
- Moisture sensitivity level: level 1
- Non degenerative
- Bi-directional



SMB-T



Marking



Schematic Symbol

APPLICATIONS

Ethernet

APPROVALS

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

ELECTRICAL CHARACTERISTICS

Part Number	V_{DRM}	V_S	V_T	I_{DRM}	I_S	I_T	I_H	C_o
	Min. (V) Pin1,3-2	Max. (V) Pin1,3-2	Max. (V)	Max. (μA) Pin1,3-2	mA	Max. (A)	Max. (mA)	Max.(pF)
P04200SC-2C	400	520	4	5	800	2.2	50	35

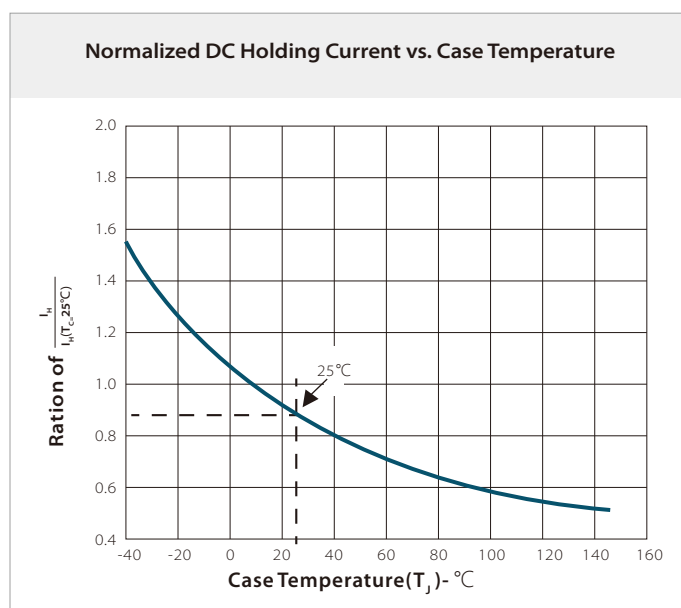
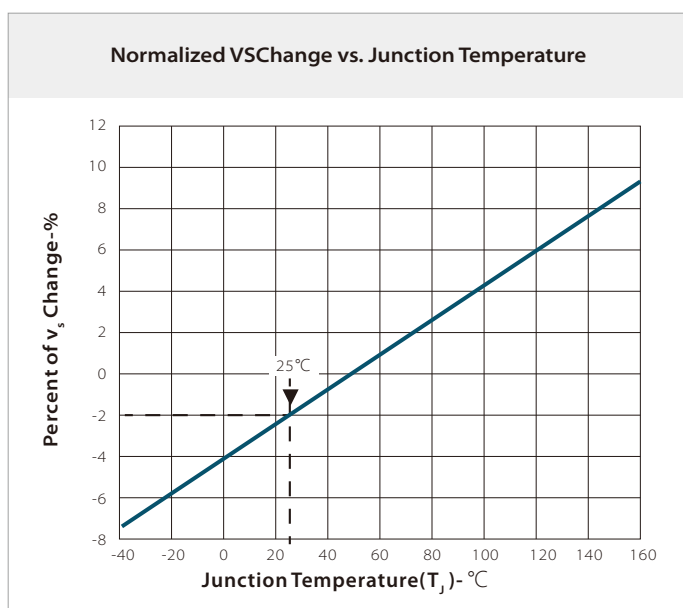
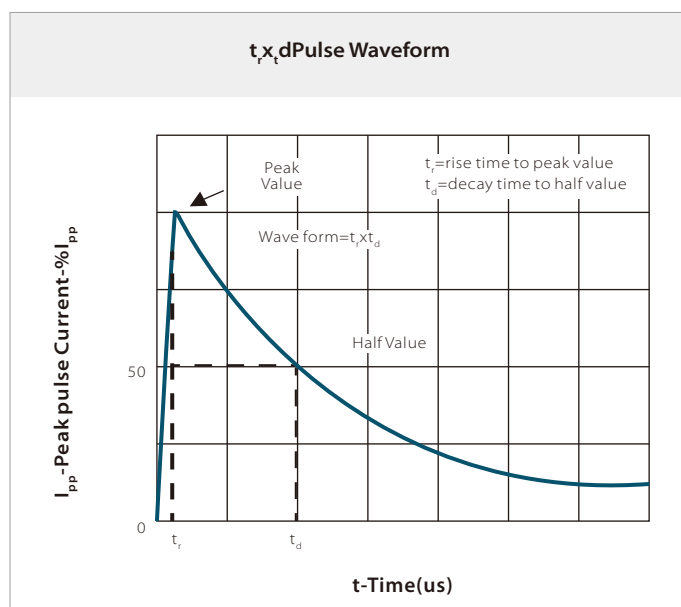
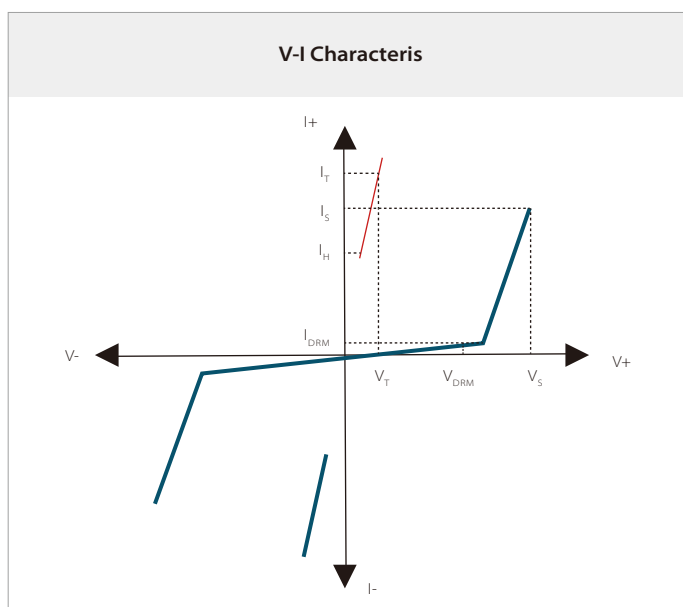
SURGE RATINGS

Current Waveform	2x10us	8x20us	10x160us	5x320us	10x1000us
Voltage Waveform	2x10us	1.2x50us	10x160us	10x700us	10x1000us
I_{PP}	500A	400A	200A	150A	100A

THERMAL CONSIDERATIONS

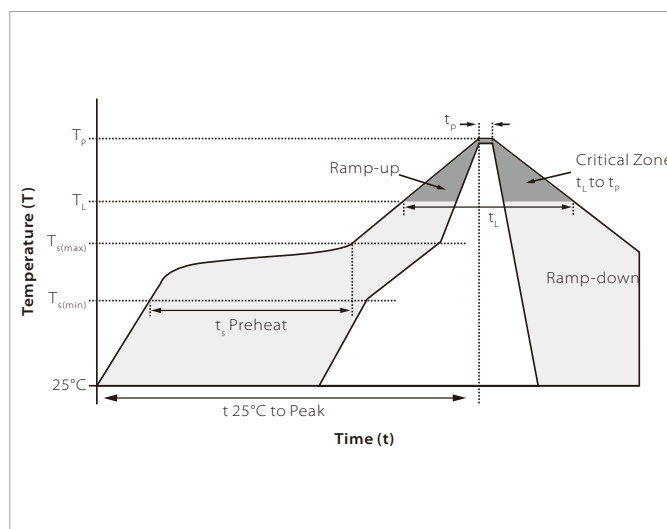
Symbol	Parameter	Value	Unit
$R_{\theta JA}$	Junction to Ambient on printed circuit	90	$^{\circ}\text{C}/\text{W}$
T_J	Operating Junction Temperature	-55 to +125	$^{\circ}\text{C}$
T_{STG}	Storage Temperature Range	-55 to +150	$^{\circ}\text{C}$

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

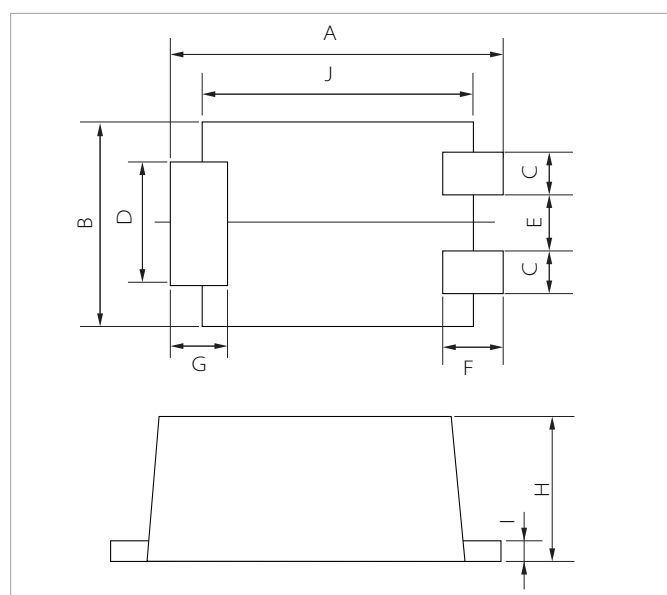


SOLDERING PARAMETERS

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_2)	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_1)	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

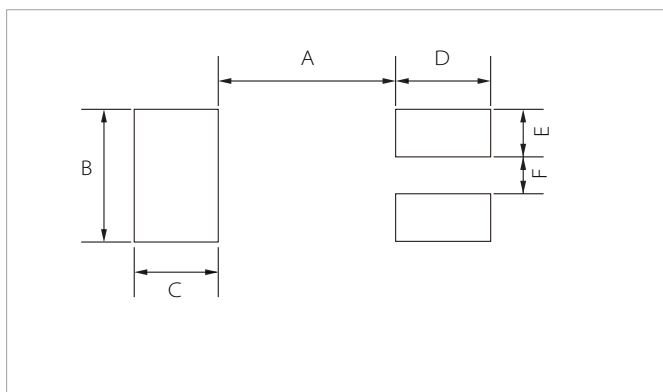


SMB-T PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	5.10	5.70	0.201	0.224
B	3.00	3.60	0.118	0.142
C	0.60	0.80	0.024	0.031
D	1.80	2.20	0.071	0.087
E	0.70	1.10	0.028	0.043
F	0.55	1.15	0.022	0.045
G	0.60	1.20	0.024	0.047
H	1.70	2.30	0.067	0.091
I	0.20	0.30	0.008	0.012
J	4.20	4.60	0.165	0.181

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Dimensions	
	Millimeters	Inches
A	3.4	0.134
B	2.5	0.098
C	1.6	0.063
D	1.8	0.071
E	0.9	0.035
F	0.7	0.028

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
P4200SC-2C	SMB-T	3000PCS	13"

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

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