

### **FEATURES**

| Excellent capability of absorbing transient surge

| Quick response to surge voltage

| Eliminates over voltage caused by fast rising transients

| Solid-state silicon te chnology, non degenera



SMB-T

### **APPLICATIONS**

| Data lines and security systems

Audio/Video line

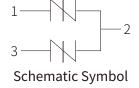
Serial ports

Network and telecom

## **APPROVALS**

RoHS Compliance with 2011/65/EU

HF Compliance with IEC61249-2-21:2003



## **ELECTRICAL CHARACTERISTICS**

		$V_{\scriptscriptstyle DRM}$	$V_s$	$V_{\scriptscriptstyle T}$	I <sub>DRM</sub>	I <sub>s</sub>	I <sub>T</sub>	I <sub>H</sub>	C <sub>o</sub>
Part Number	Marking	Min. (V) PIN1,3 - 2	Max. (V) PIN1,3 - 2	Max. (V) PIN1,3 - 2	Max. (μA)	mA	Max. (A)	Min. (mA)	Typ.(pF) PIN1,3 - 2
P0640SC-2C	P06C2	58.0	77.0	4.0	5.0	800.0	2.2	50.0	95.0

## **SURGE RATINGS**

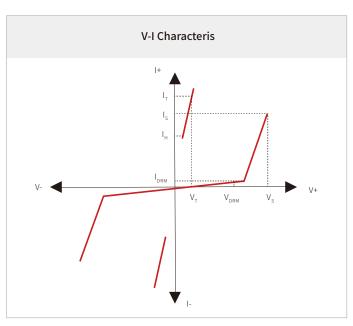
Part Number	I <sub>pp</sub> 2x10us	I <sub>PP</sub> 8x20us	I <sub>PP</sub> 10x560us	I <sub>PP</sub> 10x1000us	V <sub>PP</sub> 10x700us	I <sub>тsм</sub> 50/60Hz	d <sub>i</sub> /d <sub>t</sub>
rait Number	(A)	(A)	(A)	(A)	(V)	(A)	(A/us)
P0640SC-2C	500	400	150	100	6000	40	500

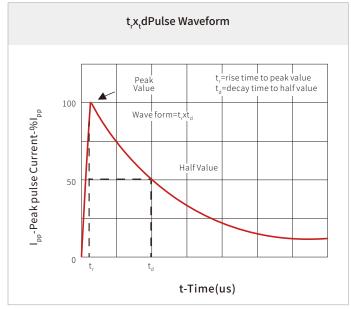


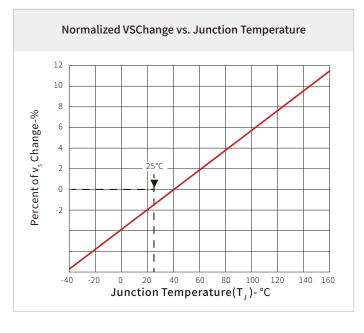
## THERMAL CONSIDERATIONS

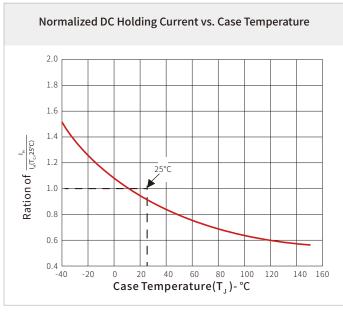
Symbol	Parameter	Value	Unit
$R_{\theta JA}$	Junction to Ambient on printed circuit	90	°C/W
T <sub>J</sub>	Operating Junction Temperature	-55 to +125	°C
$T_{STG}$	Storage Temperature Range	-55 to +150	°C

# RATINGS AND CHARACTERISTIC CURVES ( $T_A = 25$ °C)





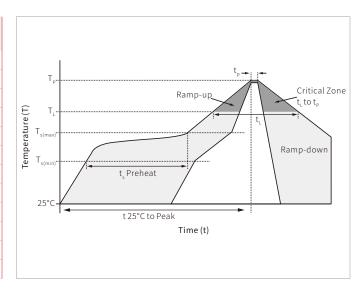




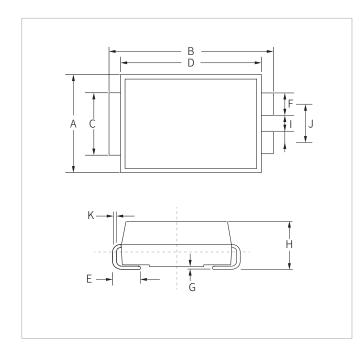


## **SOLDERING PARAMETERS**

	Reflow Condition	Lead-free assembly
	Temperature Max (T <sub>s(min)</sub> )	150°C
Pre Heat	Temperature Max (T <sub>s(max)</sub> )	200°C
	Time (min to max) $(t_s)$	60 – 180 secs
Average rar	mp up rate (Liquidus Temp $(T_L)$ to peak	3°C/second max
	T <sub>s(max)</sub> to T <sub>L</sub> - Ramp-up Rate	3°C/second max
Reflow	Temperature (T」) (Liquidus)	217°C
Kellow	Time (min to max) (t₁)	60 – 150 seconds
Peak Ten	nperature (T₅)	260°C
Time with	nin 5°C of actual peak Temperature (t <sub>p</sub> )	20 – 40 seconds
Ramp-do	own Rate	6°C/second max
Time 25°	C to peak Temperature (T♭)	8 minutes max.
Do not ex	cceed	260°C



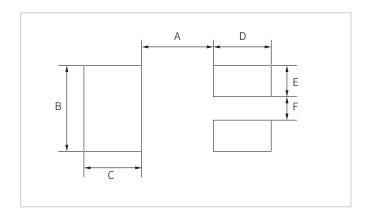
## **SMB-T PACKAGE INFORMATION**



Ref.	Millim	neters	Inches		
itel.	Min.	Max.	Min.	Max.	
А	3.40	3.94	0.134	0.155	
В	5.21	5.59	0.205	0.220	
С	1.90	2.11	0.075	0.083	
D	4.22	4.70	0.166	0.185	
Е	0.75	1.60	0.029	0.063	
F	0.46	0.71	0.018	0.028	
G	0.05	0.20	0.002	0.008	
Н	1.95	2.55	0.077	0.100	
I	0.46	0.71	0.018	0.028	
J	0.92	1.47	0.036	0.058	
K	0.20	0.35	0.008	0.014	



## **RECOMMENDED PAD LAYOUT DIMENSIONS**



Ref.	Millimeters	Inches	
А	2.0	0.079	
В	2.8	0.110	
С	2.0	0.079	
D	2.0	0.079	
Е	1.0	0.040	
F	0.56	0.022	

## **ORDERING INFORMATION**

Part Number	Component Package	QTY/Reel	Reel Size
P0640SC-2C	SMB-T	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





Wehsite

Wecha

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.