

## DESCRIPTION

The SELCxxCI Series are ultra low capacitance transient voltage suppressor arrays, designed to protect applications such as portable electronics and SMART phones. This series is rated at 350 Watts for an 8/20 $\mu$ s waveshape.

The SELCxxCI Series meets IEC 61000-4-2 (ESD) and IEC 61000-4-4 (EFT) requirements. At higher operating frequencies or faster edge rates, insertion loss and signal integrity are a major concern. This series offers an ultra low capacitance and low leakage current in a miniature SOD-323 package.

## FEATURES

- >350 Watts Peak Pulse Power per Line (tp=8/20 $\mu$ s)
- >Protects one I/O line (bidirectional)
- >Low clamping voltage
- >Working voltages: 3.3V, 5V, 8V, 12V, 15V, 18V,24V
- >Low leakage current

## APPLICATIONS

- >Cell Phone Handsets and Accessories
- >Microprocessor based equipment
- >Personal Digital Assistants (PDA's)
- >Notebooks, Desktops, and Servers
- >Portable Instrumentation
- >Peripherals
- >USB Interface

## IEC COMPATIBILITY

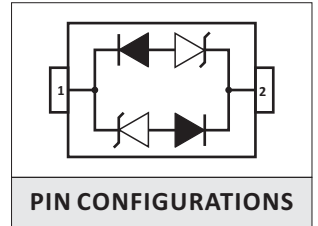
- >IEC61000-4-2 (ESD)  $\pm$ 30kV (air),  $\pm$ 30kV (contact)
- >IEC61000-4-4 (EFT) 40A (5/50ns)

## TYPICAL DEVICE CHARACTERISTICS

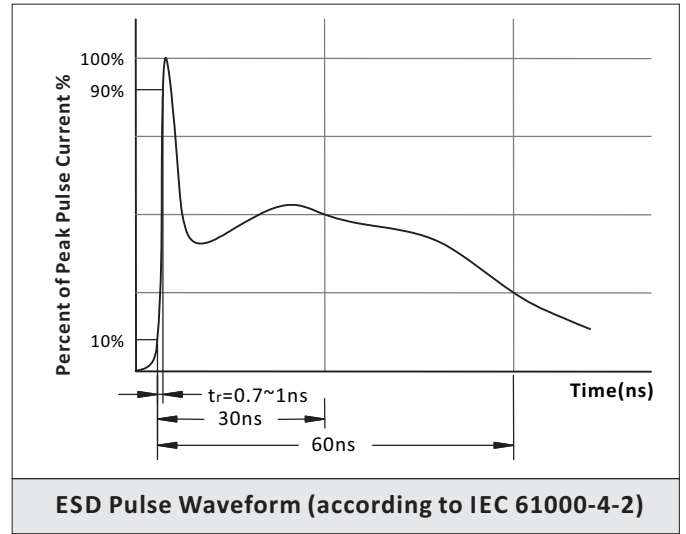
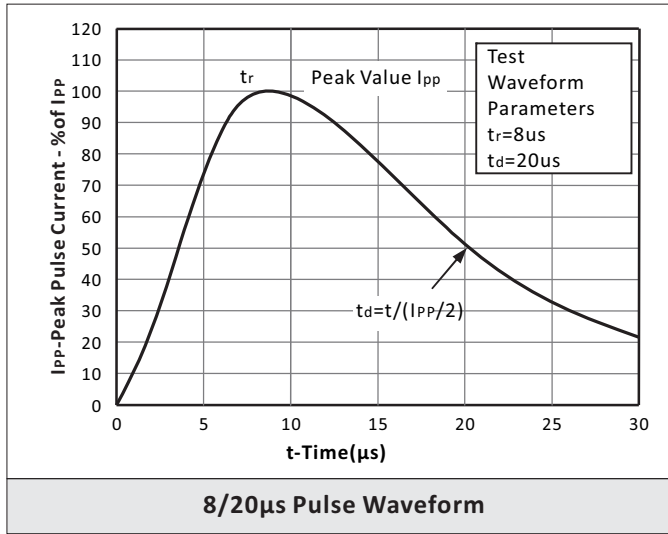
MAXIMUM RATINGS @ 25°C UNLESS OTHERWISE SPECIFIED			
PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power (tp=8/20 $\mu$ s waveform)	P <sub>PP</sub>	350	Watts
Operating Temperature Range	T <sub>J</sub>	-55~125	°C
Storage Temperature Range	T <sub>STG</sub>	-55~150	°C

## ELECTRICAL CHARACTERISTICS

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C UNLESS OTHERWISE SPECIFIED									
PART NUMBER	DEVICE MARKING	V <sub>RWM</sub> (V) Max.	V <sub>B</sub> (V) Min.	I <sub>T</sub> (mA)	V <sub>C</sub> @1A Max.	V <sub>C</sub>		I <sub>R</sub> (uA) Max.	C <sub>T</sub> (pF) Typ.
						Max.	@A		
SELC03CI	CC	3.3	4.0	1	7.5	21.0	15	1	1.0
SELC05CI	AC	5.0	6.0	1	9.8	25.0	14	1	1.0
SELC08CI	BC	8.0	8.5	1	13.4	26.0	12	1	1.0
SELC12CI	DC	12.0	13.3	1	19.0	30.0	7	1	1.0
SELC15CI	EC	15.0	16.7	1	24.0	35.0	6	1	1.0
SELC18CI	FC	18.0	20.0	1	27.0	40.0	5	1	1.0
SELC24CI	HC	24.0	26.7	1	43.0	56.0	3	1	1.0

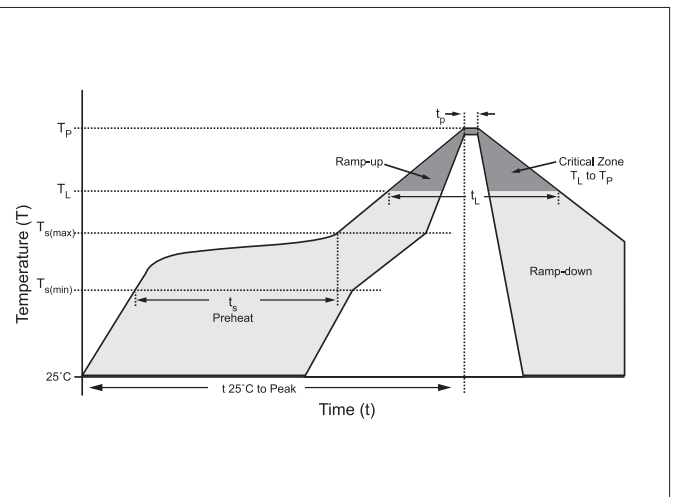


### CHARACTERISTIC CURVES



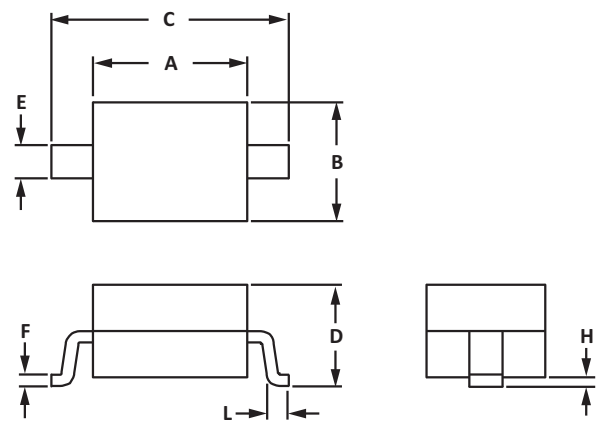
### REFLOW PROFILE

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Min (Ts(min))	150°C
	Temperature Max (Ts(max))	200°C
	Time (min to max) (ts)	60 – 180 secs
Average ramp up rate (Liquidus Temp (TL) to peak)		3°C/second max
Ts(max)to TL - Ramp-up Rate		3°C/second max
Reflow	Temperature (TL) (Liquidus)	217°C
	Time (min to max) (tl)	60 – 150 seconds
Peak Temperature (Tp)		260°C
Time within 5°C of actual peak Temperature (tp)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (Tp)		8 minutes Max.
Do not exceed		260°C



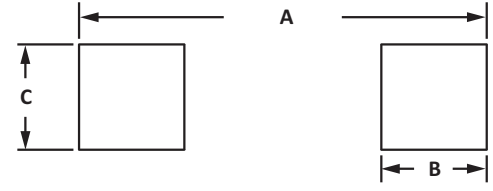
### SOD-323 PACKAGE INFORMATION

OUTLINE DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.90	0.063	0.075
B	1.15	1.45	0.045	0.057
C	2.39	2.70	0.094	0.106
D	0.80	1.10	0.031	0.043
E	0.25	0.40	0.010	0.016
F	0.10	0.20	0.004	0.008
H	-	0.10	-	0.004
L	0.20	-	0.008	-



### RECOMMENDED PAD LAYOUT DIMENSION

PAD LAYOUT DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.87	3.12	0.113	0.123
B	0.66	0.91	0.026	0.036
C	0.66	0.91	0.026	0.036



### ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SELCXXCI	SOD-323	3000PCS	7"



## CONTACT US

### Headquarters

A Building Caohejing I&E Park Pujiang Minhang Shanghai  
China

### Hotline

400-021-5756

### Web

<http://www.semiware.com.cn>

### By Telephone

Sales: 86-21-3463-7345

Customer Service: 86-21-3463-7172-8810/8826

Technical Support: 86-21-3463-7173-8811

### By Email

Sales: [sales03@semiware.com.cn](mailto:sales03@semiware.com.cn)

Customer Service: [sales17@semiware.com.cn](mailto:sales17@semiware.com.cn)

Technical Support: [fae03@semiware.com.cn](mailto:fae03@semiware.com.cn)

### By Fax

General: 86-21-3965-0654

Sales: 86-21-3463-7458

COPYRIGHT ©Semiware 2009 - This literature is subject to all applicable copyright laws and is not for resale in any manner.

SPECIFICATIONS: Semiware reserves the right to change the electrical and or mechanical characteristics described herein without notice.

DESIGN CHANGES: Semiware reserves the right to discontinue product lines without notice and that the final judgement concerning selection and specifications is the buyer's and that in furnishing engineering and technical assistance. Semiware assumes no responsibility with respect to the selection or specifications of such products. Semiware makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Semiware assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability without limitation special, consequential or incidental damages.

LIFE SUPPORT POLICY: Semiware products are not authorized for use in life support systems without written consent from the factory.

