

**DESCRIPTION**

The SELCxxC 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 8/20μs waveshape.

The SELCxxC 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 a ultra low capacitance and low leakage current in a miniature SOD-323 package.

**FEATURES**

- >350 Watts Peak Pulse Power per Line (tp=8/20μs)
- >Protects one I/O line (bidirectional)
- >Low clamping voltage
- >Working voltages: 3.3V, 5V, 8V, 12V, 15V, 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) ±15kV (air), ±8kV (contact)
- >IEC61000-4-4 (EFT) 40A (5/50ns)
- >IEC61000-4-5 (Lightning) 12A (8/20μs)

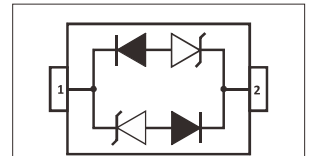
**TYPICAL DEVICE CHARACTERISTICS**

MAXIMUM RATINGS @ 25°C UNLESS OTHERWISE SPECIFIED			
PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power (tp=8/20μs waveform)	PPP	350	Watts
Lead Soldering Temperature	T <sub>L</sub>	260(10 sec.)	°C
Operating Temperature Range	T <sub>J</sub>	-55~125	°C
Storage Temperature Range	T <sub>STG</sub>	-55~150	°C

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		
SELC03C	L3	3.0	4.0	1	7.0	15.0	17	5	3.0
SELC05C	L5	5.0	6.0	1	9.8	18.5	12	5	3.0
SELC08C	L8	8.0	8.5	1	13.4	22.5	12	1	3.0
SELC12C	LA	12.0	13.3	1	19.0	28.3	8	1	3.0
SELC15C	LB	15.0	16.7	1	24.0	32.3	6	1	3.0
SELC24C	LD	24.0	26.7	1	43.0	56.5	5	1	3.0

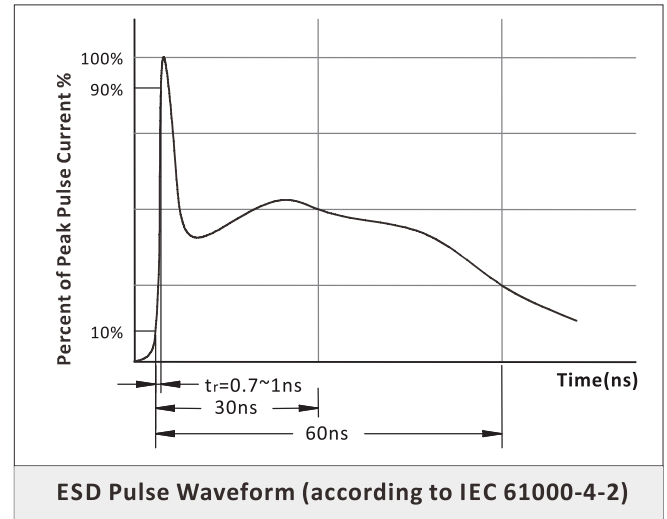
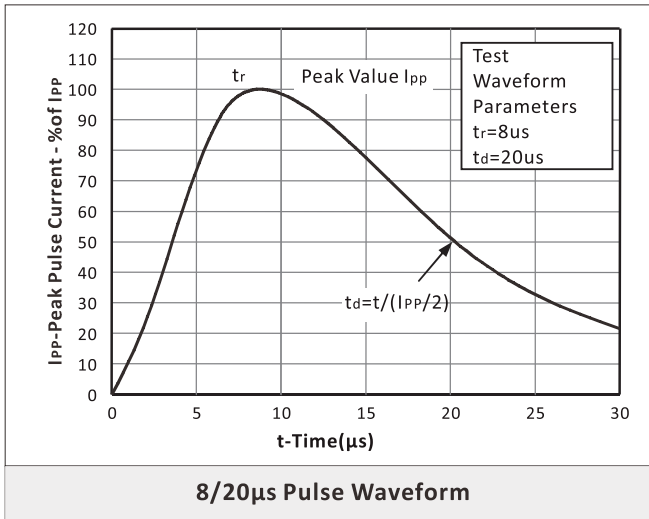


SOD-323 PACKAGE



PIN CONFIGURATIONS

**CHARACTERISTIC CURVES**

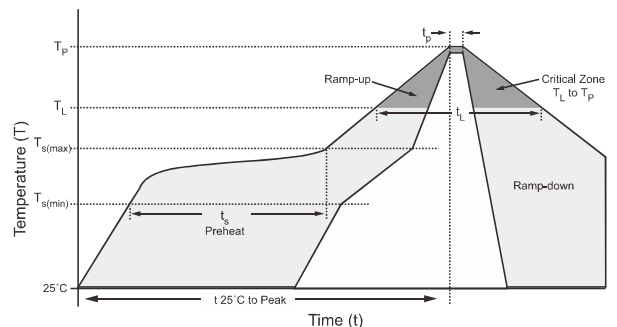


**ENVIRONMENTAL CHARACTERISTICS**

Testing Items	Technical Standards
High Temperature Reverse Bias Test	Temperature:150±3°C,Bias=80%VDRM ;Time:168H
High Temperature Life Test	Temperature:150°C;Time:168H
High-Low Temperature Cycle Test	Temperature:From -40°C to 150°C ;Dwell Time:30min,10-100 Cycles
High Temperature&High Humidity Test	Temperature:85°C.Humidity:85%; Time:168H
Pressure Cooker Test	Temperature:121°C,2 atm.Humidity:100%; Time:24H To 168H
Resistance Of Soldering Heat	Temperature:260±5°C;Time Of Dip Soldering:10s,3 Times

**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) (ts)	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

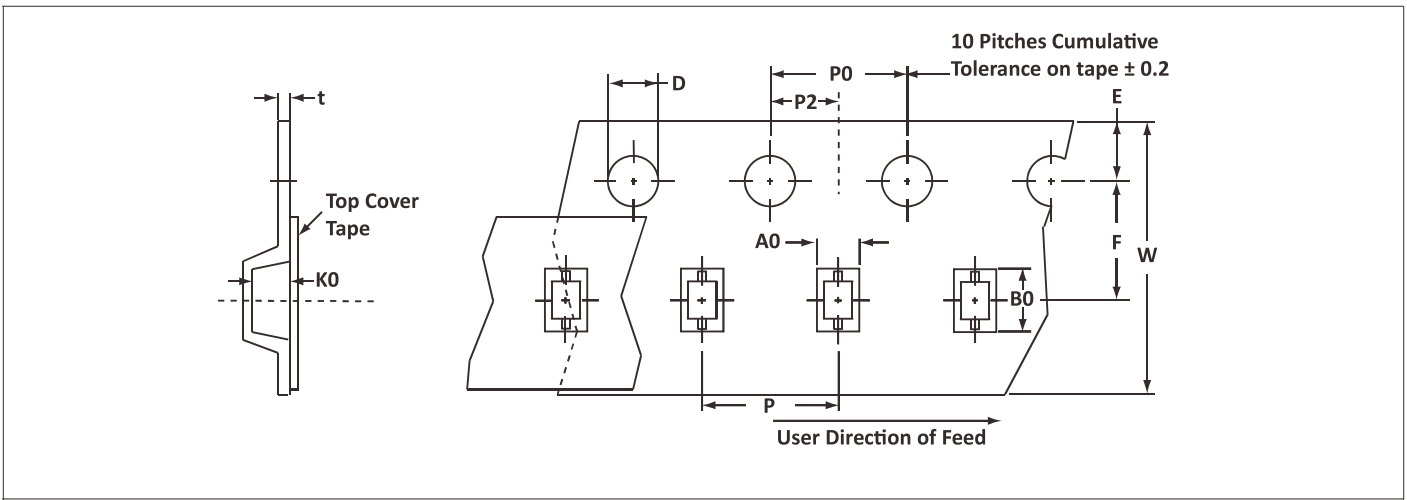


**SOD-323 PACKAGE INFORMATION**

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	-

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

**TAPE AND REEL**



**SPECIFICATIONS**

REEL DIA.	TAPE WIDTH	A0	B0	K0	D	E	F	W	P0	P2	P	tmax
178mm (7")	8mm	1.55 ± 0.10	2.90 ± 0.10	1.35 ± 0.10	1.50 ± 0.10	1.75 ± 0.10	3.50 ± 0.05	8.00 ± 0.30	4.00 ± 0.10	2.00 ± 0.05	4.00 ± 0.10	0.25

**NOTES**

- Dimensions are in millimeters.
- Surface mount product is taped and reeled in accordance with EIA-481.
- Suffix - T7 = 7" Reel - 3,000 pieces per 8mm tape.
- Marking on Part - marking code (see page 1)

## **CONTACT US**

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