

**DESCRIPTION**

The SE23T10U5.0UB1 is an ultra low capacitance transient voltage suppressor array, designed to protect applications such as portable electronics and SMART phones. It is rated at 66 Watts for an 8/20μs waveshape.

The SE23T10U5.0UB1 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. The SE23T10U5.0UB1 offers a low leakage current in a miniature SOT-23 package.

**FEATURES**

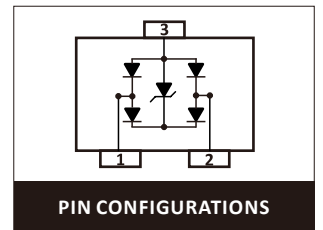
- >100 Watts Peak Pulse Power per Line (tp=8/20μs)
- >Low Leakage Current
- >Operating Voltage: 5.0V
- >Low Clamping Voltage
- >Protects Two Lines

**APPLICATIONS**

- >Cellular Handsets & Accessories
- >Antennas
- >Two I/O Lines
- >Keypads, Side Keys, LCD Displays
- >Circuit Signal Lines
- >Notebooks & Desktop Computers
- >Portable Instrumentation

**IEC COMPATIBILITY**

- >IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- >IEC61000-4-2(LIGHTNING) 4A(8/20us)
- >IEC61000-4-4 (EFT) 40A (5/50ns)



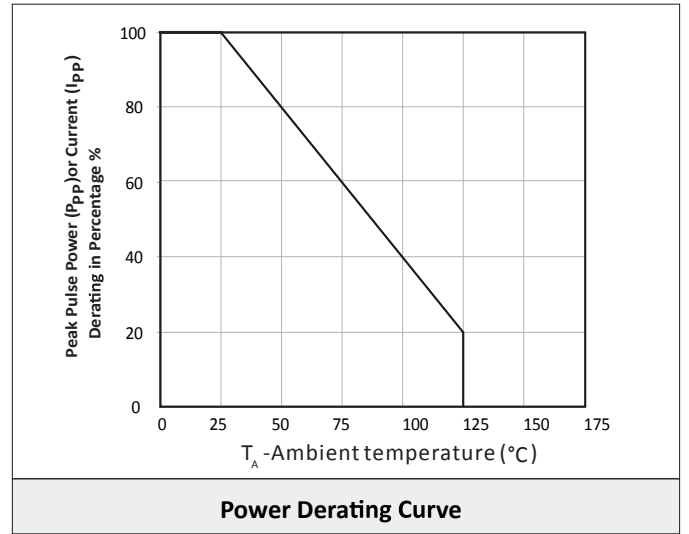
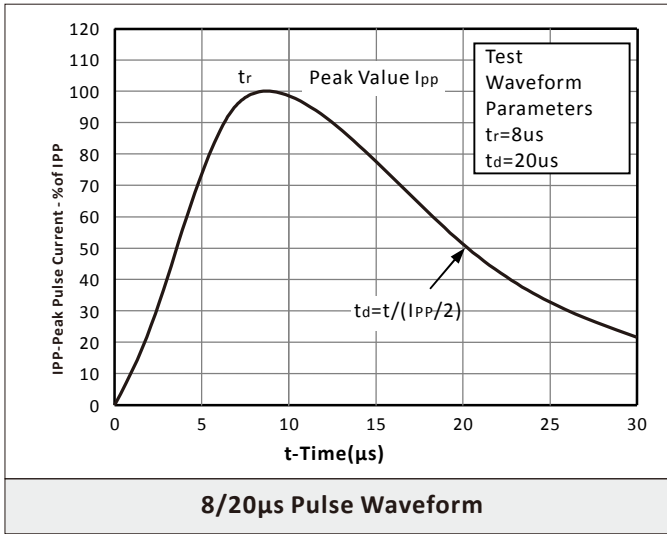
**MAXIMUM RATINGS @ 25°C UNLESS OTHERWISE SPECIFIED**

PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power (tp=8/20μs waveform)	PPP	100	Watts
Operating Temperature Range	TJ	-55~125	°C
Storage Temperature Range	TSTG	-55~150	°C

**ELECTRICAL CHARACTERISTICS PER LINE @ 25°C UNLESS OTHERWISE SPECIFIED**

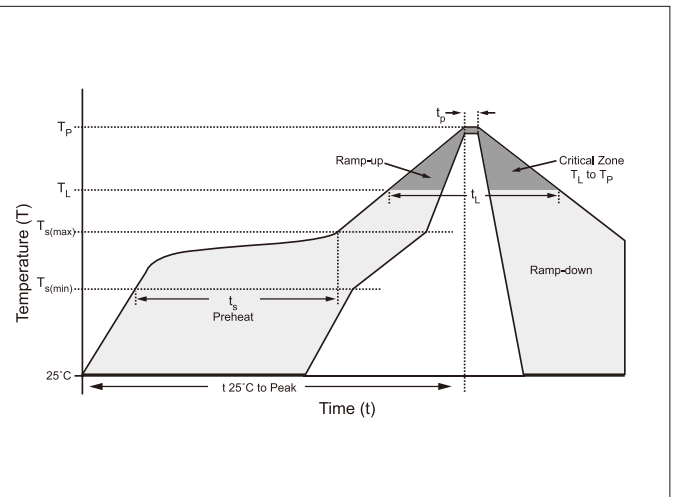
PART NUMBER	DEVICE MARKING	V <sub>RWM</sub>	V <sub>BR</sub>	I <sub>T</sub>	V <sub>C</sub> @1A	V <sub>C</sub>		I <sub>R</sub>	C <sub>T</sub>
		(V) Max.	(V) Min.	(mA)	Max.	Max.	@A	(uA) Max.	(pF) Typ.
SE23T10U5.0UB1	R22	5.0	6.0	1	12	25	4.0	1	0.4

**PRODUCT DIMENSIONS**



**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



**SOT-23 PACKAGE INFORMATION**

OUTLINE DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.80	3.04	0.110	0.120
B	1.20	1.40	0.047	0.055
C	0.89	1.11	0.035	0.044
D	0.37	0.50	0.015	0.020
G	1.78	2.04	0.070	0.081
H	0.01	0.100	0.001	0.004
J	0.085	0.180	0.003	0.007
K	0.35	0.69	0.014	0.029
L	0.89	1.02	0.035	0.040
S	2.10	2.64	0.083	0.104
V	0.45	0.60	0.018	0.024

**NOTES**  
 1. Controlling dimension: inches.  
 2. Dimensions are exclusive of mold flash and metal burrs.

**RECOMMENDED PAD LAYOUT DIMENSION**

PAD LAYOUT DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.71	0.97	0.028	0.038
B	1.88	2.13	0.074	0.084
C	0.71	0.97	0.028	0.038
D	0.81	1.07	0.032	0.042

**NOTES**  
 1. Controlling dimension: inches.

**ORDERING INFORMATION**

Part Number	Component Package	QTY/Reel	Reel Size
SE23T10U5.0UB1	SOT-23	3000PCS	7"

## **CONTACT US**

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