

DESCRIPTION

The SE35T12U5.0MB is an ultra low capacitance transient voltage suppressor array, designed to protect applications such as portable electronics and SMART phones. It is rated at 125 Watts for an 8/20 μ s waveshape.

The SE35T12U5.0MB 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 product offers a low leakage current in a miniature SOT-523 package.

FEATURES

- >125 Watts Peak Pulse Power per Line (tp=8/20 μ s)
- >Protects Two Lines
- >Operating Voltage: 5.0V
- >Low Clamping Voltage
- >Low Leakage Current

APPLICATIONS

- >Notebooks, Desktops, Servers and Video Graphics Cards
- >USB Power & Data Line Protection
- >Monitors and Flat Panel Displays
- >I²C BUS Protection
- >Portable Instrumentation
- >Set-Top Box

IEC COMPATIBILITY

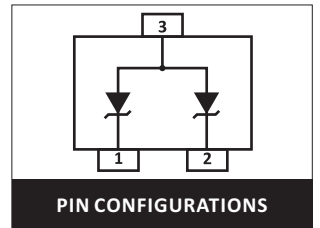
- >IEC61000-4-2 (ESD) \pm 15kV (air), \pm 8kV (contact)
- >IEC61000-4-4 (EFT) 40A (5/50ns)
- >IEC61000-4-5 (Lightning) 5A (8/20 μ s)

MAXIMUM RATINGS @ 25°C UNLESS OTHERWISE SPECIFIED

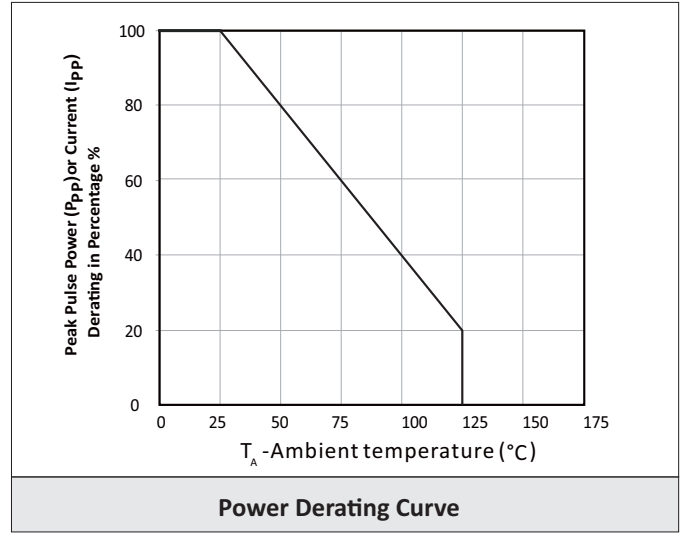
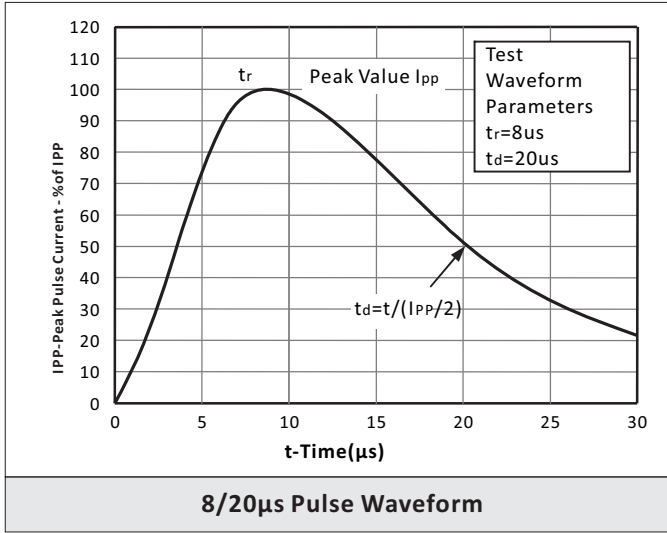
PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power (tp=8/20 μ s waveform)	PPP	125	Watts
Operating Temperature Range	T _J	-55~125	°C
Storage Temperature Range	T _{STG}	-55~150	°C

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C UNLESS OTHERWISE SPECIFIED

PART NUMBER	DEVICE MARKING	V _{RWM}	V _B	I _T	V _{C @1A}	V _C		I _R	C _T
		(V) Max.	(V) Min.	(mA)	Max.	Max.	@A	(μ A) Max.	(pF) Max.
SE35T12U5.0MB	P5	5.0	6.0	1	15.0	25.0	5.0	1	1.0

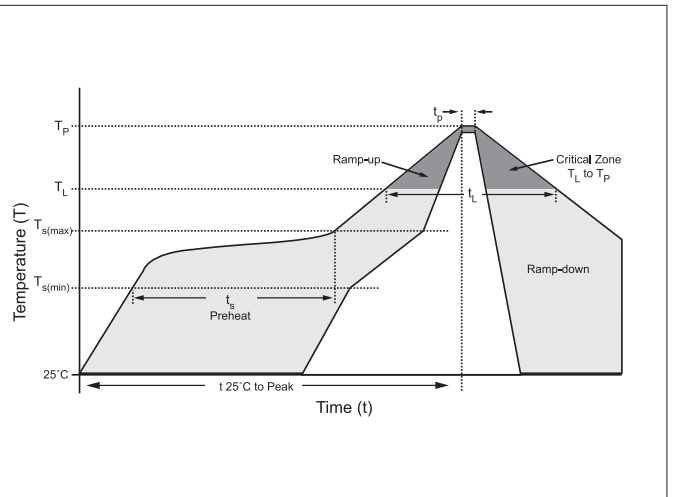


CHARACTERISTIC CURVES



REFLOW PROFILE

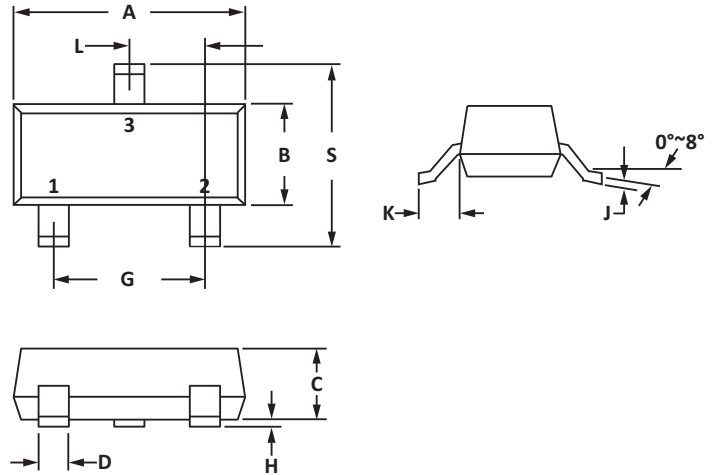
Reflow Condition		Lead-free assembly
Pre Heat	Temperature Min (Ts(min))	150°C
	Temperature Max (Ts(max))	200°C
	Time (min to max) (ts)	60 – 180 secs
Average ramp up rate (Liquidus Temp (TL) to peak)		3°C/second max
Ts(max)to TL - Ramp-up Rate		3°C/second max
Reflow	Temperature (TL) (Liquidus)	217°C
	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



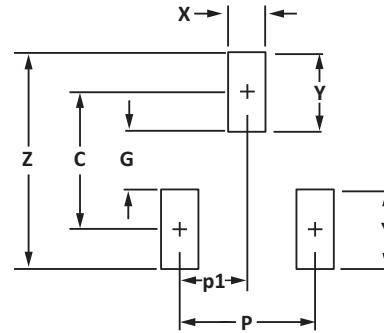
SOT-523 PACKAGE INFORMATION

OUTLINE DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.50	1.70	0.059	0.067
B	0.75	0.85	0.029	0.033
C	0.60	0.80	0.023	0.031
D	0.15	0.30	0.005	0.012
G	1.00BSC		0.039BSC	
H	0.00	0.10	0.000	0.004
J	0.10	0.20	0.004	0.008
K	(0.22)		(0.009)	
L	0.50BSC		0.020BSC	
S	1.45	1.75	0.057	0.069

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



PAD LAYOUT DIMENSIONS		
DIM	MILLIMETERS	INCHES
C	(1.40)	(0.055)
P	1.00	0.039
p1	0.50	0.020
G	0.60	0.024
X	0.40	0.016
Y	0.80	0.031
Z	2.20	0.087



ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SE35T12U5.0MB	SOT-523	3000PCS	7"



CONTACT US

Headquarters

No.3387 Shendu Road Pujiang I&E Park Minhang Shanghai
China

Hotline

400-021-5756

Web

[Http://www.semiware.com.cn](http://www.semiware.com.cn)

By Telephone

General: 86-21-3463-7172

Sales: 86-21-3463-7345

Technical Support: 86-21-34637172-8811

By Fax

General: 86-21-3965-0654

Sales: 86-21-3463-7458

By Email

General: china@semiware.com.cn

Sales: sales33@semiware.com.cn

Technical Support: fae03@semiware.com.cn

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