

DESCRIPTION

The SEULC0524P is an ultra low capacitance TVS array designed to protect high speed data interfaces. This series has been specifically designed to protect sensitive components which are connected to high speed data and transmission lines from overvoltage caused by ESD (electrostatic discharge), CDE-(Cable Discharge Events), and EFT (electrical fast transients).

The SEULC0524P has a typical capacitance of only 0.4pF between I/O pins. This allows it to be used on circuits operating in excess of 3GHz without signal attenuation.

FEATURES

- >100 Watts Peak Pulse Power per Line (tp=8/20μs)
- >Protects four I/O lines
- >Operating voltage: 5V
- >Low capacitance: 0.8pF typical (I/O to GND)
- >Weight: 8.0mg

APPLICATIONS

- > High Definition Multi-Media Interface (HDMI)
- > Digital Visual Interface (DVI)
- > MDDI Ports
- > PCI Express
- > Serial ATA
- > 10/100/1000 Ethernet

IEC COMPATIBILITY

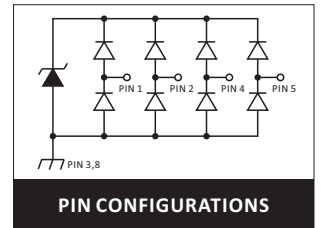
- >IEC61000-4-2 (ESD) ±15kV (air), ±10kV (contact)
- >IEC61000-4-4 (EFT) 40A (5/50ns)
- >IEC61000-4-5 (Lightning) 5A (8/20μs)

MAXIMUM RATINGS @ 25°C UNLESS OTHERWISE SPECIFIED

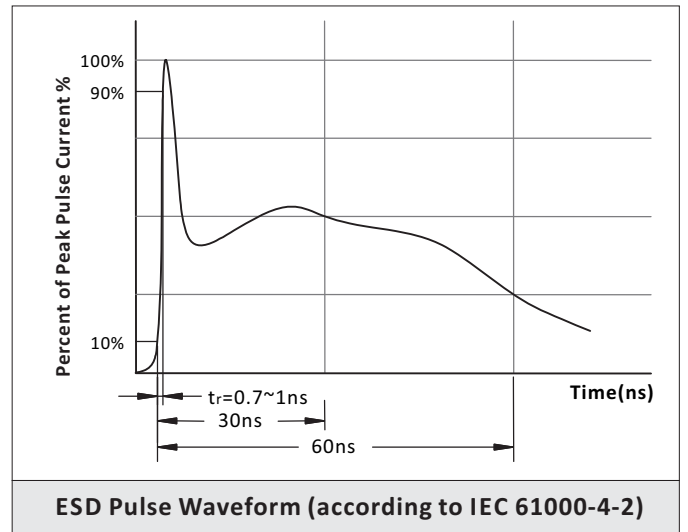
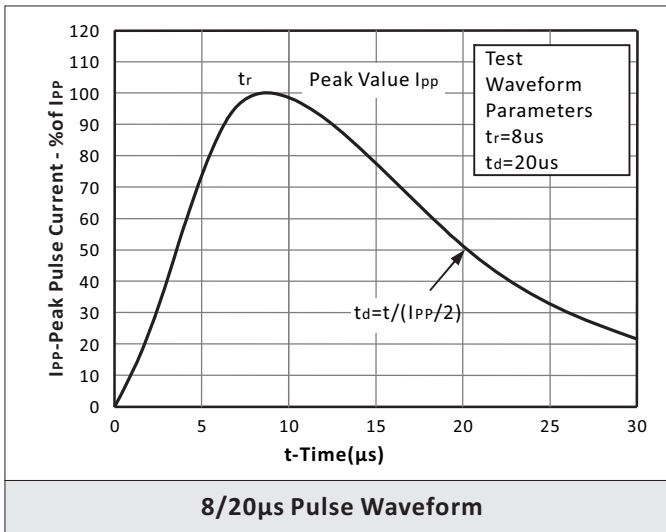
PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power (tp=8/20μs waveform)	PPP	100	Watts
Operating Temperature Range	TJ	-55~125	°C
Storage Temperature Range	TSTG	-55~150	°C

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C UNLESS OTHERWISE SPECIFIED

PART NUMBER	VRWM (V) Max.	VB (V) Min.	IT (mA)	Vc @1A Max.	Vc		IR (uA) Max.	Cj I/O-I/O (pF) Typ.	Cj I/O-GND (pF) Typ.
					Max.	@A			
SEULC0524P	5.0	6.0	1	12.0	16.0	5.0	1	0.4	0.8

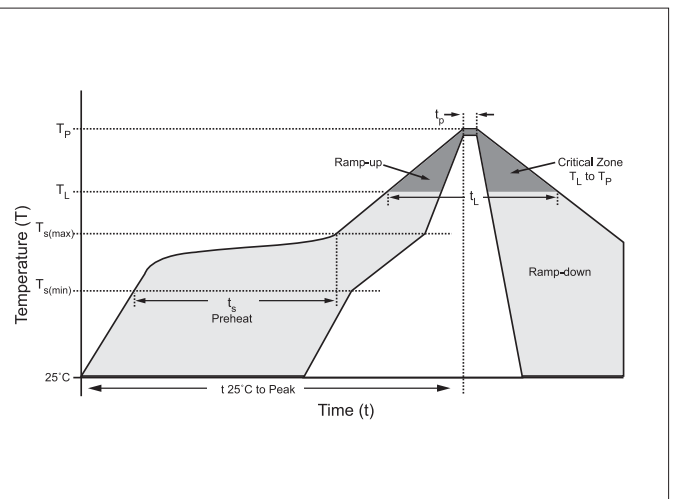


CHARACTERISTIC CURVES



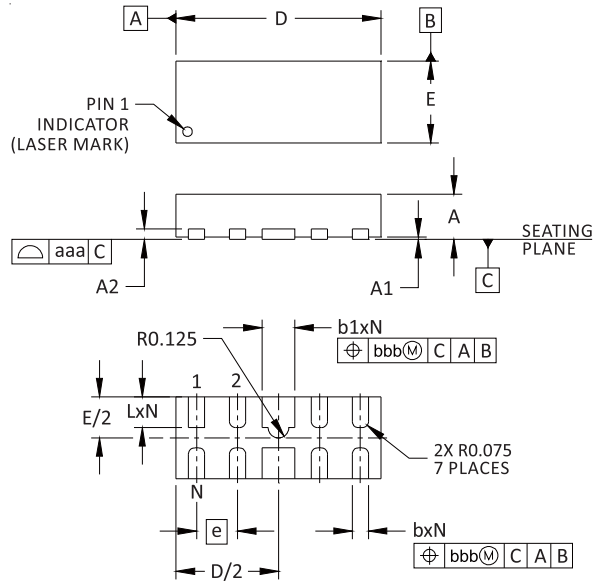
REFLOW PROFILE

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Min ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_P)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max.
Do not exceed		260°C

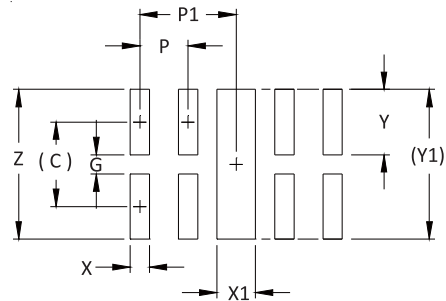


DFN2510P10 PACKAGE INFORMATION

OUTLINE DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.50	0.60	0.020	0.026
A1	0	0.05	0	0.002
A2	(0.13)		(0.005)	
b	0.15	0.25	0.006	0.010
b1	0.35	0.45	0.014	0.018
D	2.40	2.60	0.094	0.102
E	0.90	1.10	0.035	0.043
e	0.50 BSC.		0.020 BSC.	
L	0.30	0.45	0.012	0.018
N	8		8	
aaa	0.08		0.003	
bbb	0.10		0.004	



PAD LAYOUT DIMENSIONS		
DIM	MILLIMETERS	INCHES
	NOMINAL	NOMINAL
C	0.87	0.034
G	0.20	0.008
P	0.50	0.020
P1	1.00	0.039
X	0.20	0.008
X1	0.40	0.016
Y	0.68	0.027
Y1	1.55	0.061
Z	1.55	0.061



ORDERING INFORMATION

Part Number	Marking Code	Component Package	QTY/Reel	Reel Size
SEULC0524P	P524	DFN2510P10	3000PCS	7"



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