

DESCRIPTION

The SELC0522P is an ultra low capacitance TVS array. It is designed to protect computing applications such as gigabit Ethernet, HDMI, USB and DVI interfaces as well as telecommunication equipment and systems.

The SELC0522P is available in the space-saving DFN1510TP6 package configuration. It meets the IEC 61000-4-2 (ESD), 61000-4-2 (EFT) and 61000-4-4 (Surge) requirements. At higher operating frequencies or faster edge rates, insertion loss and signal integrity are a major concern. This device in conjunction with passive components integrated into a TVS/filter network can be used for EMI/RFI protection.

FEATURES

- > 75 Watts Peak Pulse Power per Line ($t_p=8/20\mu s$)
- > Protects two high speed lines
- > Low Clamping Voltage
- > Weight: 3.0mg
- > RoHS Compliant

APPLICATIONS

- > High Definition Multi-Media Interface (HDMI)
- > Digital Visual Interface (DVI)
- > MDDI Ports
- > PCI Express
- > Serial ATA

IEC COMPATIBILITY

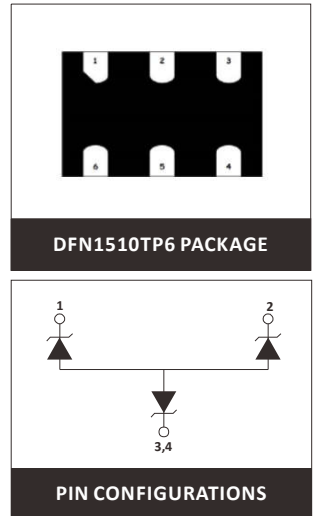
- > IEC61000-4-2 (ESD) $\pm 15kV$ (air), $\pm 15kV$ (contact)
- > IEC61000-4-4 (EFT) 40A (5/50ns)
- > IEC61000-4-5 (Lightning) 2.5A (8/20 μs)

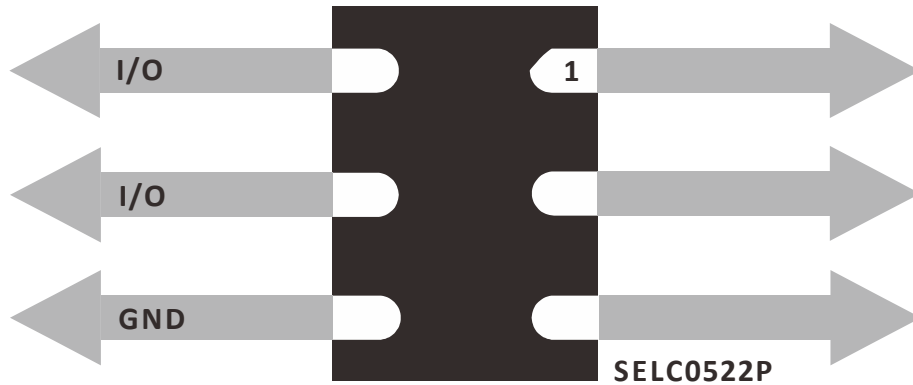
MAXIMUM RATINGS @ 25°C UNLESS OTHERWISE SPECIFIED

PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power ($t_p=8/20\mu s$ waveform)	PPp	75	Watts
Lead Soldering Temperature	T _L	260(10 sec.)	°C
Operating Temperature Range	T _J	-55~150	°C
Storage Temperature Range	T _{STG}	-55~150	°C

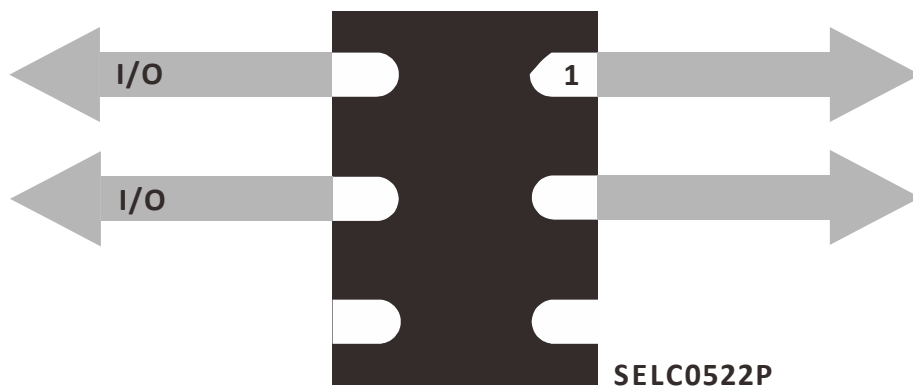
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C UNLESS OTHERWISE SPECIFIED

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	(μA) Max.	(pF) Typ.
SELC0522P	UL12	5.0	6.0	1	18.0	30.0	2.5	1	0.2



LAYOUT DIAGRAM INFORMATION


Protected two I/O Lines with GND

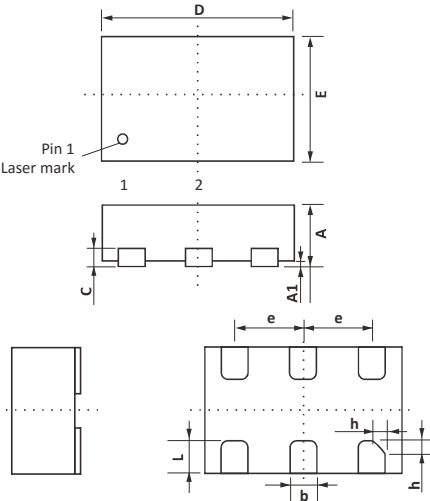


Protected two I/O Lines without GND



DFN1510TP6 PACKAGE INFORMATION

OUTLINE DIMENSIONS			
DIM	MILLIMETERS		
	MIN	NOM	MAX
A	0.70	0.75	0.80
A1	-	0.02	0.05
b	0.17	0.20	0.25
c	0.15	0.20	0.25
D	1.45	1.50	1.55
E	0.90	1.00	1.10
e	0.50 BSC		
L	0.20	0.25	0.30
h	0.08	0.10	0.12



ENVIRONMENTAL CHARACTERISTICS

Testing Items	Technical Standards
High Temperature Reverse Bias Test	Temperature:150±3°C,Bias=80%V _{DRM} ;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

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SELC0522P	DFN1510TP6	3000PCS	7"



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