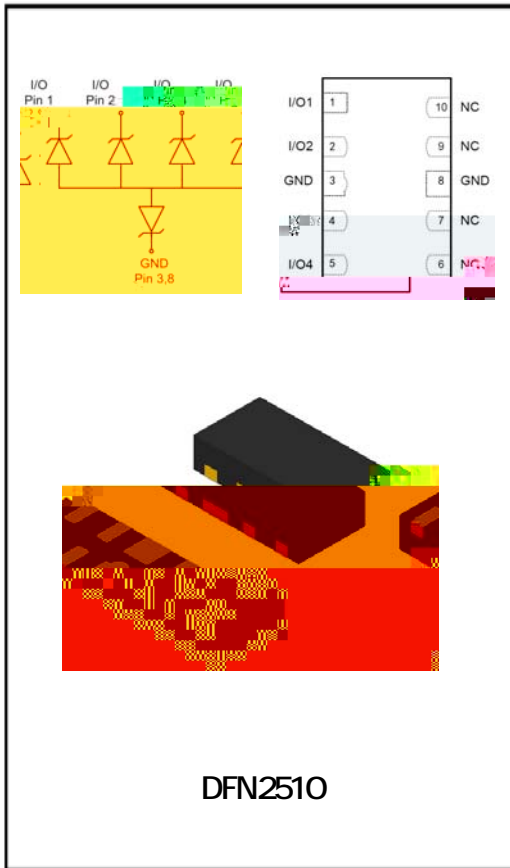


4-Line, Bi-directional, Transient Voltage Suppressor



Features

- Operating voltage: 24V
- Transient protection for each line according to
 - IEC61000-4-2(ESD): $\pm 30\text{kV}$ (contact)
 - IEC61000-4-5(surge): 5A (8/20 μs)
- Ultra low capacitance: $C_j=6\text{pF}$ typ
- Ultra low leakage
- Low clamping voltage
- Up to 4 lines protects
- RoHS Compliant
- Terminals: Tin plated leads, solderabl per J-STD-002 and JESD22-B102
- Moisture Sensitivity: Level 3 per J-STD-020
- Marking Information: See Below

Definitions of electrical characteristics

FORM



ESD2404P5B

Maximum Ratings

PARAMETER	SYMBOL	LIMITS	UNIT
Peak pulse power ($t_p = 8/20\mu s$)	P_{pk}	170	W
Peak pulse current ($t_p = 8/20\mu s$)	I_{pp}	5	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 30	KV
ESD according to IEC61000-4-2 contact discharge		± 30	
Junction temperature	T_J	-55~125	$^{\circ}C$
Storage temperature	T_{STG}	-55~150	$^{\circ}C$

Electrical Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse maximum working voltage	V_{RWM}	V	Any I/O pin to ground			24
Reverse leakage current	I_R	μA	$V_{RWM} = 5.0V$, any I/O pin to ground			0.2
Reverse breakdown voltage	V_{BR}	V	$I_T = 1mA$, any I/O pin to ground			



ESD2404P5B

Fig.7 ESD clamping
(+8kV contact discharge per IEC61000-4-2)

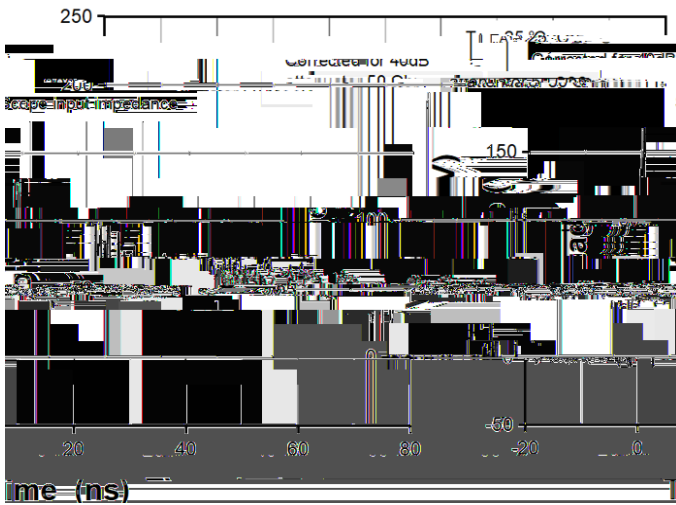
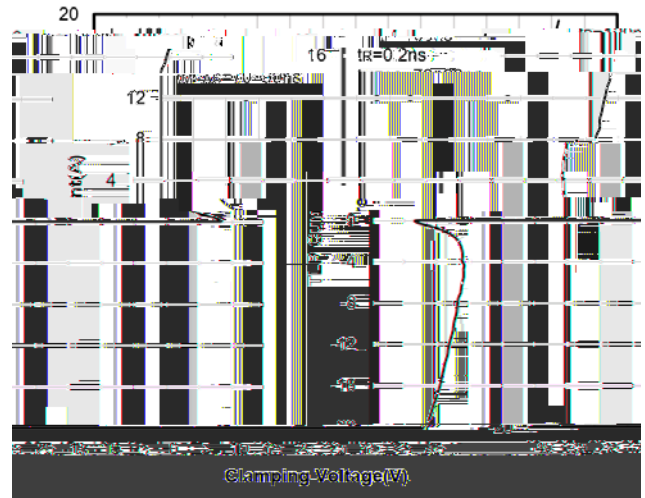
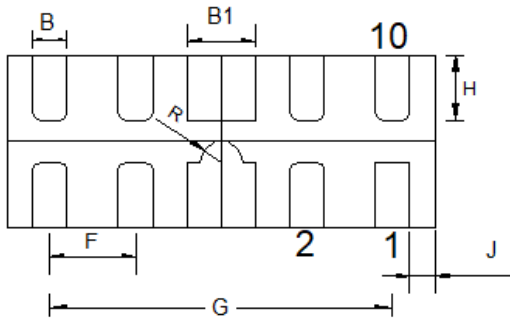
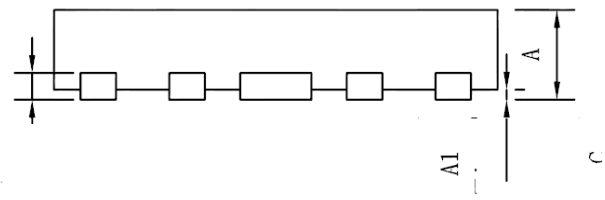
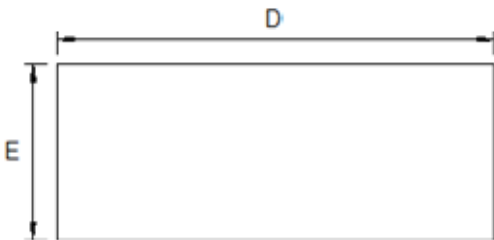


Fig.8 TLP Measurement

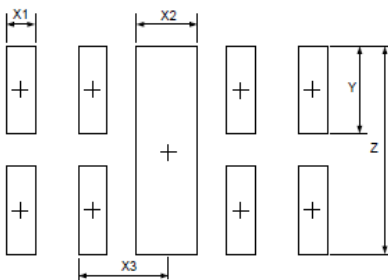


Outline Dimensions



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.40	0.45	0.50
A1	--	0.02	0.05
B	0.15	0.20	0.25
B1	0.35	0.40	0.45
F	0.10	0.15	0.20
G	2.15	2.10	2.15
H	0.25	0.20	0.25
J	0.10	0.15	0.20

Soldering Footprint



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
X1	0.200	0.008
X2	0.400	0.016
X3	0.600	0.024
Y	0.600	0.024
Z	1.400	0.056

Notes:

This recommended land pattern is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met.



Disclaimer