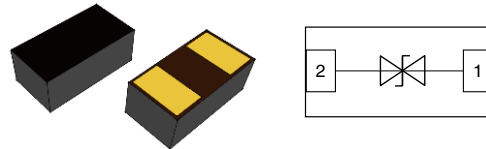


Features

- ESD protection for high speed data lines to IEC61000-4-2
- ESD contact discharge typical 8KV, max 15KV
- ESD air discharge typical 15KV, max 25KV
- Surface mount
- Extremely low capacitance
- Very low leakage current
- Fast response time
- Bi-directional ESD protection
- Lead free solder termination
- The best ESD protection for high frequency, low voltage applications



Mechanical Data

- **Case:** 0402 (plastic package).
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

- USB3.0, Firewire, DVI, HDMI, S-ATA
- Thunderbolt, Display Port
- Mobile HDMI Link, MDDI, MIPI, SWP / NFC

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Maximum Contact discharge voltage Per IEC61000-4-2	---	15KV	V
Maximum Air discharge voltage Per IEC61000-4-2	---	25KV	V
Maximum Operating temperature	T _{OPER}	-40 to +90	°C
Maximum Storage temperature	T _{STG}	-55 to +125	°C
Maximum lead temperature for soldering during 10s	T _L	260	°C

Electrical Characteristics

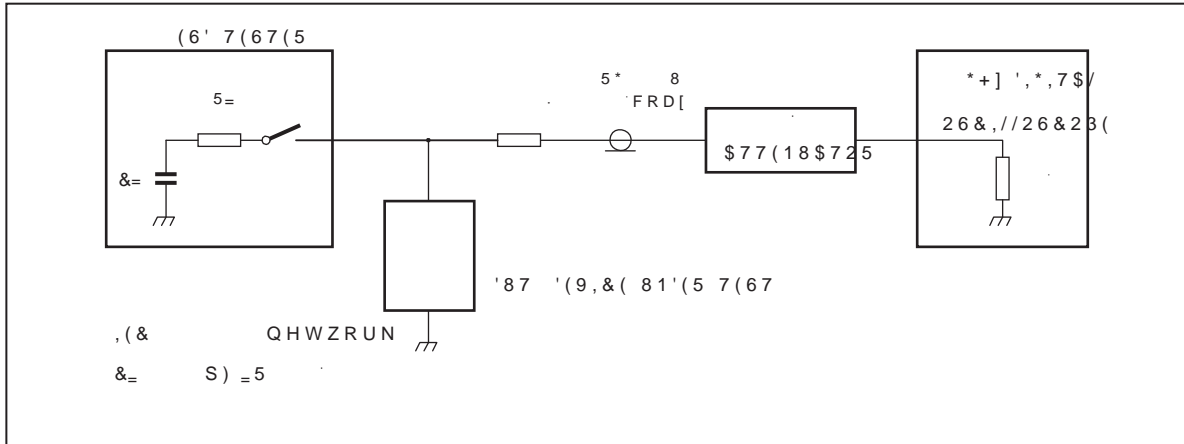
(T_A = 25 °C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Rated Voltage	V _R	---		9		V
Trigger voltage	V _T	IEC61000-4-2 8KV contact discharge		300		V
Clamping voltage	V _C	IEC61000-4-2 8KV contact discharge		35		V
Leakage current	I _L	DC 12V shall be applied on component			0.10	uA
Capacitance	C _P	V _R = 0V, f = 1MHz		0.05		pF

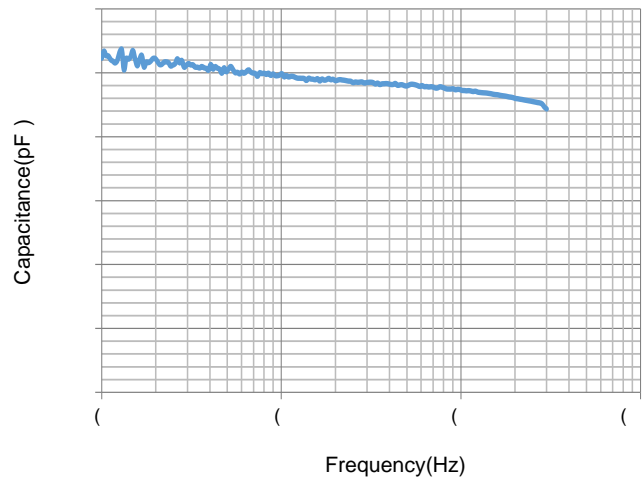
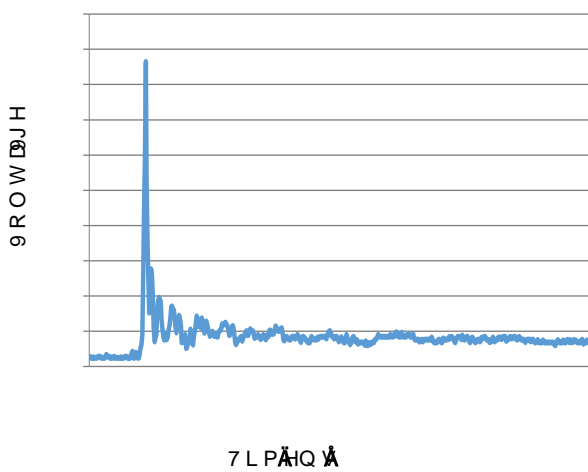
Note: 1 Trigger and clamping voltage are measured per IEC 61000-4-2, 8KV contact discharge method.

2 After reliability tests such as high temp storage, temp cycles, continuous ESD strike etc, the maximum leakage current is less than 10uA.

ESD Clamping Test

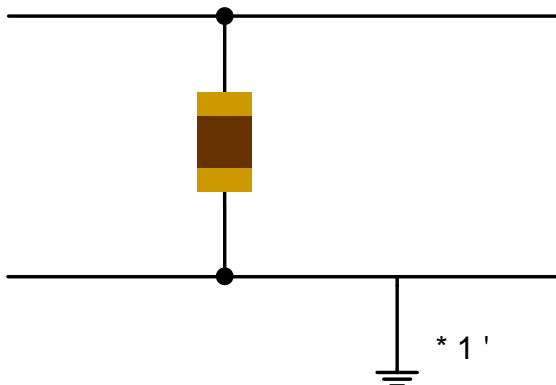


Typical Device Capacitance VS. Frequency



7\SLFDO (6' 5HVSQRQVH

7KH (6' LV GHVLJQHG IRU WKH SURWHFWLRQ RI RQH ELGLUHFWL
 „ 3ODFH&(6' FORVH WR WKH RQGHV RYHUHQWV RYHUHQWV
 „ 0LQLPL]H WKH SDWK O&(6' DQG GHVWDELOLWV WKH WHG VLJQDO OLC
 „ 8VH JURXQG SODQHV ZKHQHYHU SRVLEOH
 6LJQDO OLQH WR EH SURWHFWHG



3URGXFW 'LPHQVLRQ

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Ordering information

PESD0942U005		Tape and reel	1 000pcs / reel	EIA STD RS-481
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