



2.5V LOW VOLTAGE BIDIRECTIONAL TVS DIODE

Applications

- Cellular Handsets & Accessories
- Keypads, Side Keys, Audio Ports
- Portable Instrumentation'
- Notebooks, Desktops, and Servers
- Digital Lines
- Tablet PC

IEC COMPATIBILITY

- IEC61000-4-2 (ESD) $\pm 30\text{kV}$ (air), $\pm 30\text{kV}$ (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (LIGHTING) 17A (8/20 μs)

FEATURES

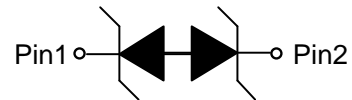
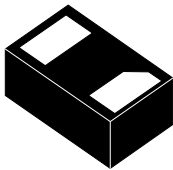
- 150 Watts Peak Pulse Power per Line (tp=8/20 μs)
- Protects One Bidirectional I/O Lines
- Low Clamping Voltage
- RoHS Compliant

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DFN1006-2L

Circuit Diagram



MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)

PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20 μs waveform)	P _{PP}	150	Watts
Lead Soldering Temperature	T _L	260 (10 sec.)	°C
Operating Temperature Range	T _J	-40 ~ 125	°C
Storage Temperature Range	T _{STG}	-55 ~ 150	°C



DEVICE CHARACTERISTICS

LECTRICAL CHARACTERISTICS PER LINE (@ 25°C Unless Otherwise Specified)

PART NUMBER	DEVICE MARKING	V _{RWM} (V) (max.)	V _B (V) (min.)	I _T (mA)	V _C (@1A) (max.)	V _C (@10A) (max.)	V _C (@17A) (max.)	I _R (μA) (max.)	C _T (pF) (typ.)
ESD10D2V5B1S151H	TF	2.5	3.2	1	4.2	6.5	8.8	0.1	23

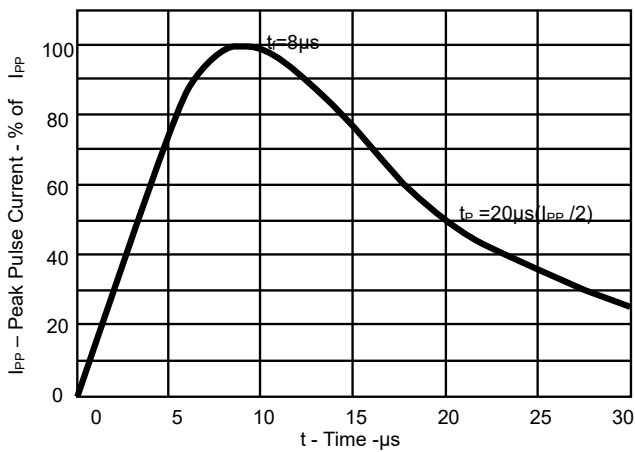


Fig 1. Pulse Waveform

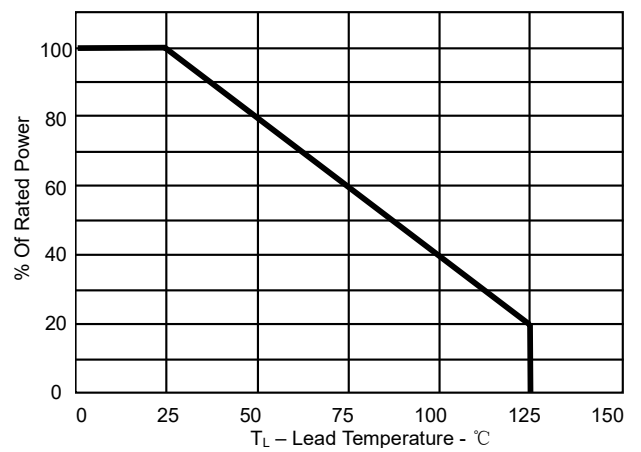
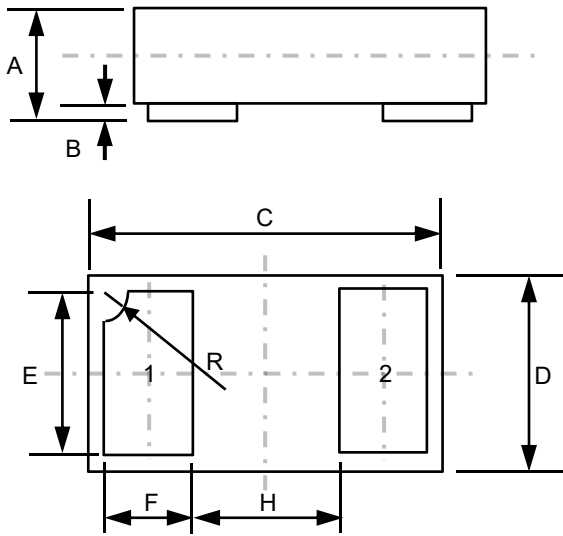


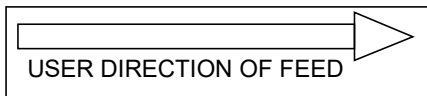
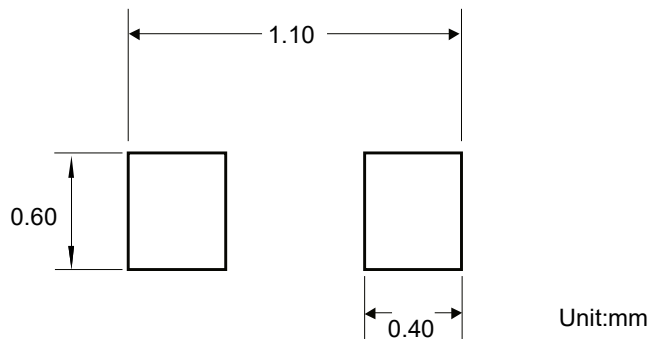
Fig 2. Power Derating Curve



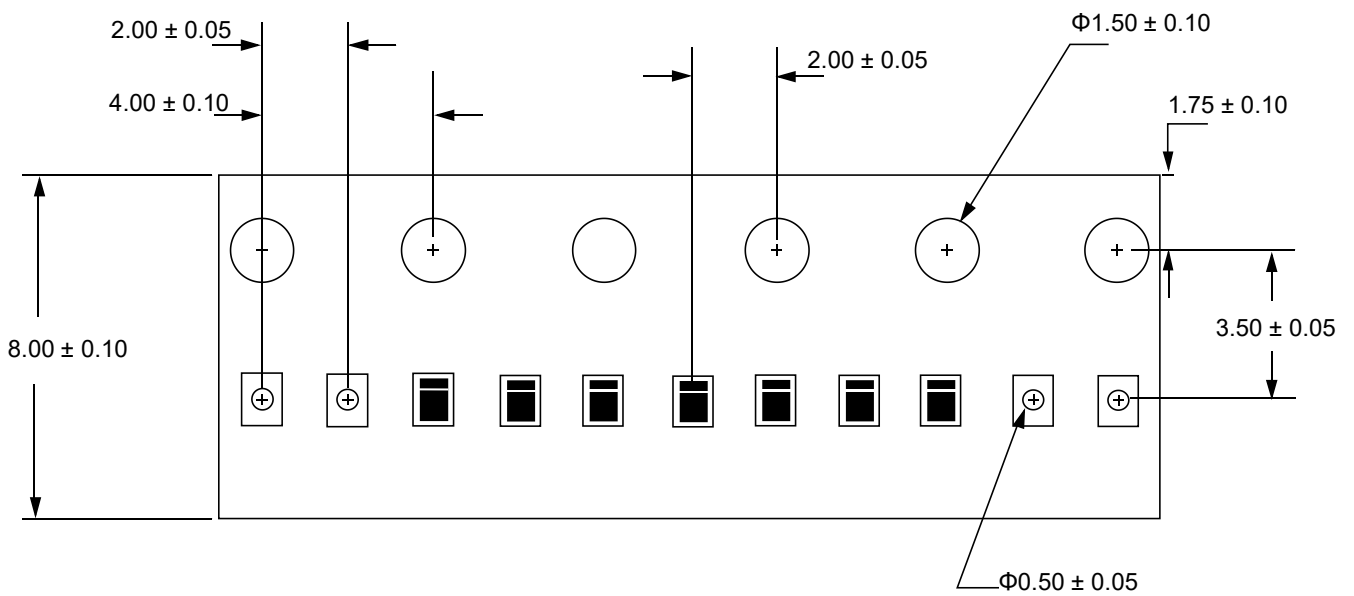
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Dim	Millimeters		
	MIN	NOM	MAX
A	0.45	0.50	0.55
B	0.00	0.02	0.05
C	0.95	1.00	1.050
D	0.55	0.60	0.65
E	0.45	0.50	0.55
F	0.20	0.25	0.30
H	0.40Typ.		
R	0.07	0.12	0.17



Suggested PCB Layout





NOTICE

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