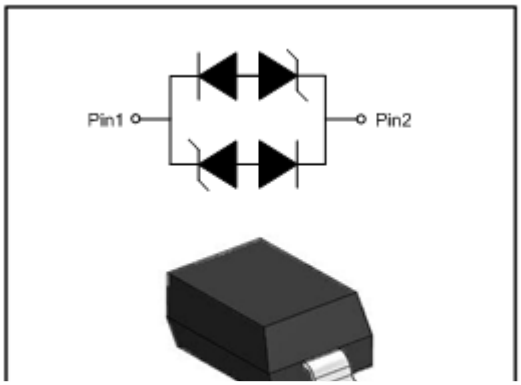
1-Line Low Capacitance Bi-directional TVS Diode



Features

- ●360W peak pulse power (8/20μs)
- ●Ultra low capacitance: 1pF typical
- ●Ultra low leakage: nA level
- ●Operating voltage:5V
- ●Low clamping voltage
- ●Protects one power line or data line
- ●Complies with following standards:
  - – IEC 61000-4-2 (ESD) immunity test
    Air discharge: ±30Kv
    Contact discharge: ±30kV
  - – IEC61000-4-5 (Lightning) 18A (8/20μs)
- ●RoHS Compliant

■Maximum Ratings

PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power (8/20μs)	Ppk	360	W
Peak Pulse Current (8/20μs)	I_{PP}	18	A
ESD per IEC 61000−4−2 (Air) ESD per IEC 61000−4−2 (Contact)	V_{ESD}	±30 ±30	KV
Operating Temperature Range	T_J	−55 to +125	℃
Storage Temperature Range	Tstg	−55 to +150	℃

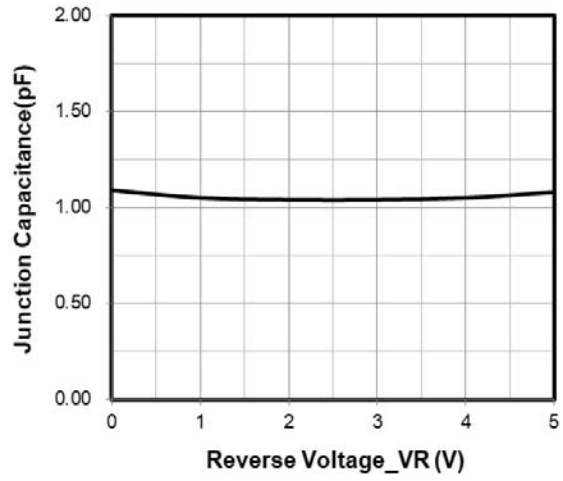
■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	TYP	MAX
Reverse Working Voltage	V_{RWM}	V				5
Breakdown Voltage	V_{BR}	V	I_T = 1mA	6		
Reverse Leakage Current	I_R	μA	V_{RWM} = 5V			0.2
Clamping Voltage	V_C	V	I_{PP} = 1A (8/20μs pulse)			10
Clamping Voltage	V_C	V	I_{PP} = 18A (8/20μs pulse)			20
Junction Capacitance	C_J	pF	V_R = 0V, f = 1MHz		1	

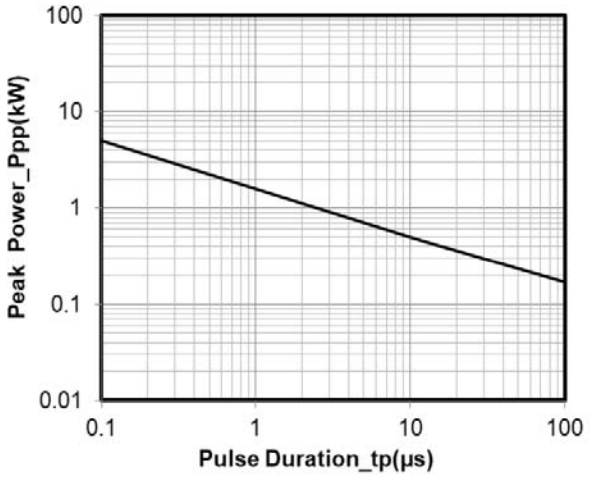
■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
ESDSLC5V0D3BA	F2	Approximate 0.004	3000	30000	120000	7” reel

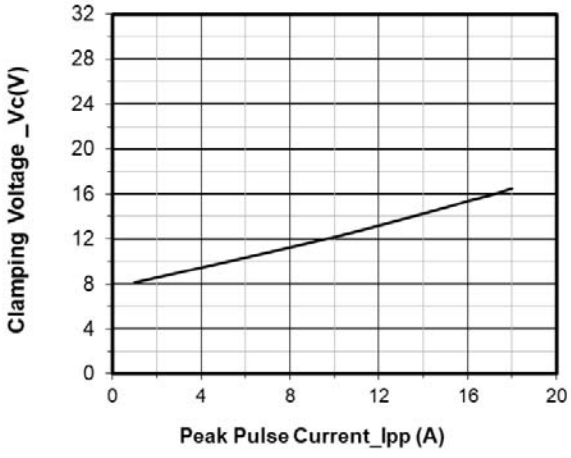
■ Characteristics (Typical)



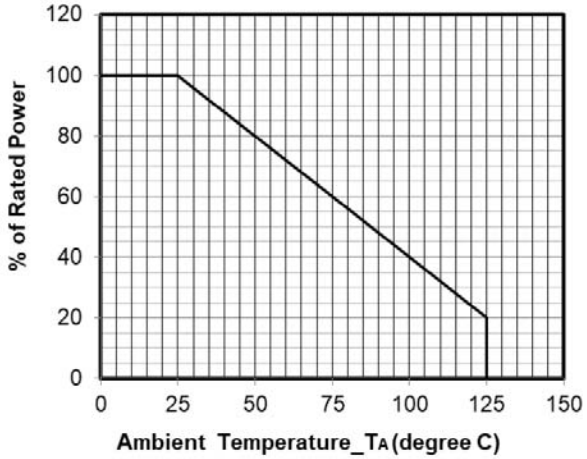
Junction Capacitance vs. Reverse Voltage



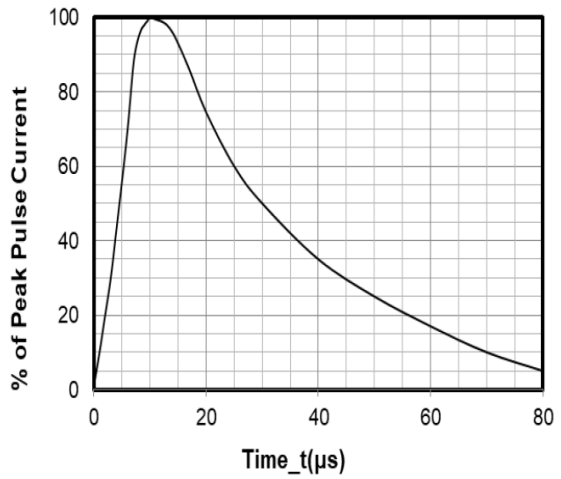
Peak Pulse Power vs. Pulse Time



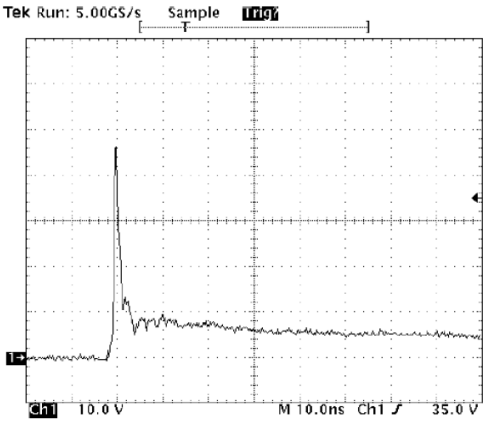
Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



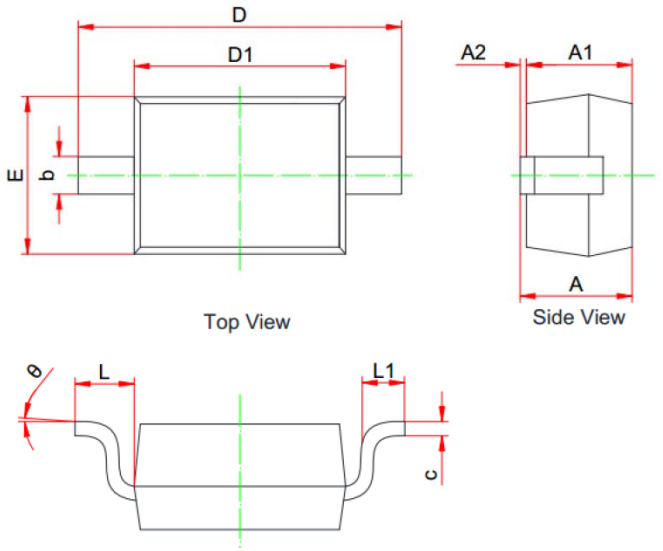
8 X 20μs Pulse Waveform



Note：Data is taken with a 10x attenuator

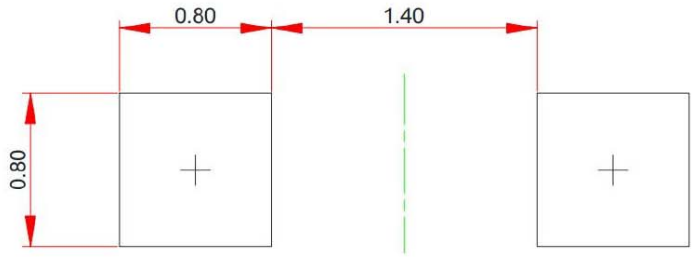
ESD Clamping Voltage
8 kV Contact per IEC61000−4−2

■ Outline Dimensions



SYM	MILLIMETERS		
	MIN	NOM	MAX
A	0.800	- -	1.100
A1	0.800	- -	0.900
A2	0.000	- -	0.100
b	0.250	- -	0.400
c	0.080	- -	0.177
D1	1.600	1.700	1.800
D	2.300	- -	2.800
E	1.150	- -	1.400
L	0.475REF		
L1	0.100	- -	0.500
Θ	0°	- -	8°

■ Soldering Footprint



Unit：mm

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