

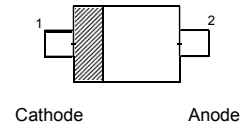
Transient Voltage Suppressors

for ESD Protection

Features

- Low clamping voltage
- Low leakage
- Transient protection for high speed data lines to IEC 61000 -4-2 (ESD) ±15kV (air), ±8kV (contact)

SOD-323



Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Peak Pulse Power (tp = 8/20 μs)	P _{pk}	350	W
Peak Pulse Current (tp = 8/20 μs)	I _{pp}	20	A
ESD Voltage (HRB Waveform per IEC61000-4-2)	V _{pp}	30	KV
Operating Junction Temperature	T _j	- 55 to + 125	°C
Storage Temperature Range	T _{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C (VF= 0.9V Max. at IF= 10mA)

DEVICE	Marking Code	VRWM (V) MAX	IR(μA) VRWM MAX	VBR(V) @IT=1mA		IPP(A)	VC MAX	CJ(pF) MAX
				MIN	MAX			
ESD3Z3V3	C3	3.3	0.5	5	7	20	15	200
ESD3Z4V5	E4	4.5	0.5	5	7	140	18	1200
ESD3Z5V0	5	5	0.1	6	8	25	13	185
ESD3Z7V0	7	7	0.5	7.6	9.5	24	13	250
ESD3Z8V0	8	8	0.5	8	10	8	16	50
ESD3Z12	1B	12	0.1	13.3	16	3.5	24	13
ESD3Z15	1E	15	0.1	16	19	8	35	45
ESD3Z18	1I	18	0.1	20	24	6	35	40
ESD3Z20	2	20	0.1	20	25	8	33	60
ESD3Z20H	2H	20	0.1	22	25.5	40	39	230
ESD3Z24	2D	24	0.1	26.5	30	5	51	32
ESD3Z36	3F	36	0.2	39.5	45	3.6	65	20

1) tp = 8/20 μs

Electrical Parameter

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T

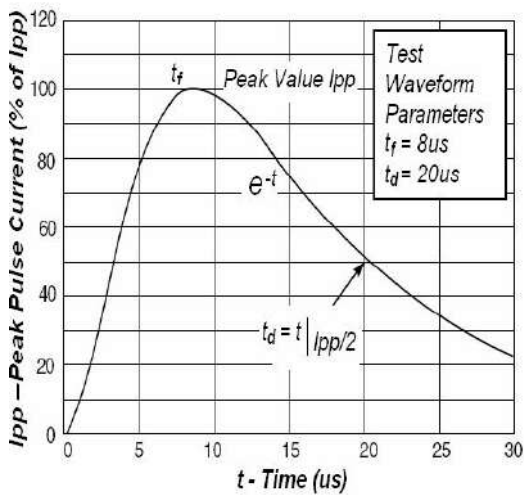
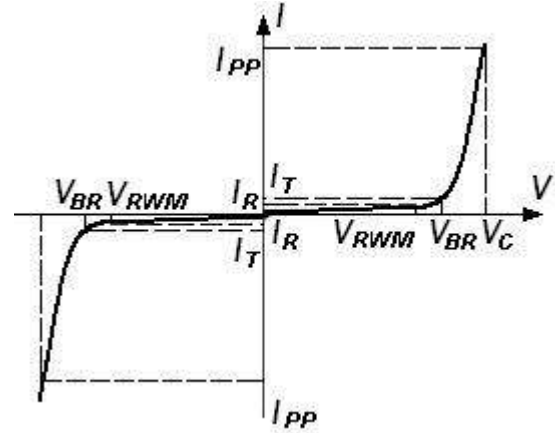


Fig1. Pulse Waveform

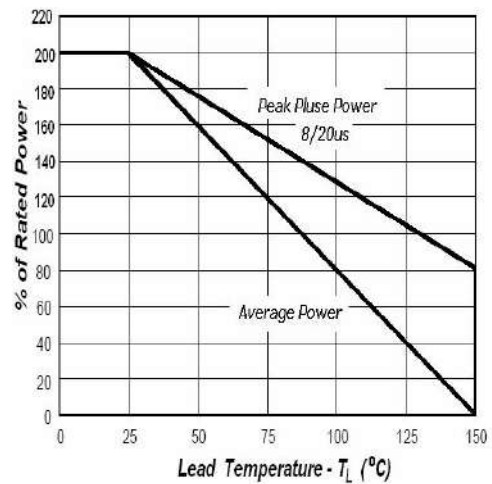
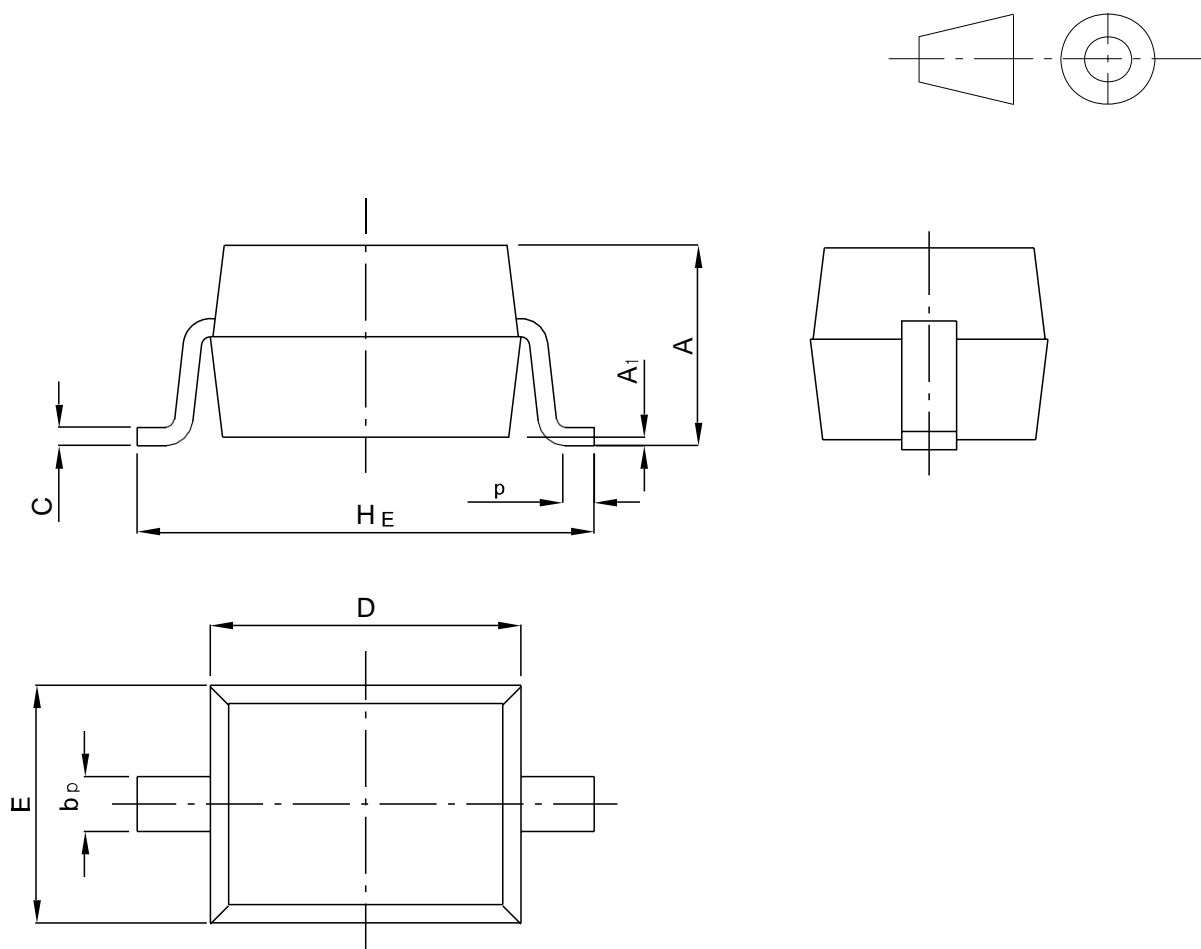


Fig2. Power Derating

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b _p	C	D	E	H _E	A ₁	L _p
mm	1.20	0.40	0.15	1.80	1.35	2.80	0.10	0.50
	0.90	0.25	0.10	1.60	1.15	2.30	0.01	0.20