

Features

- * 150W peak pulse power (8/20 μ s)
- * Protects one data or power line
- * Operating voltage: 12V
- * Ultra low clamping voltage
- * Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
Air discharge: ± 30 kV
Contact discharge: ± 30 kV
 - IEC61000-4-5 (SURGE) 5A (8/20 μ s)

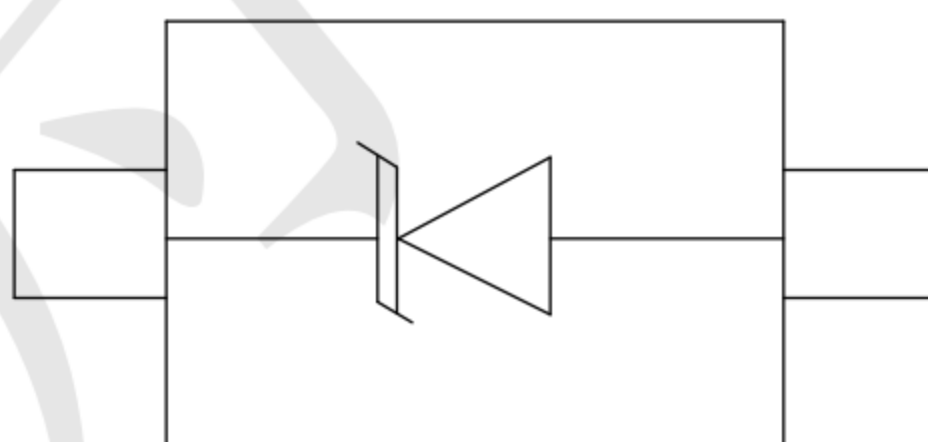
Mechanical Characteristics

- * Package: SOD-723
- * Ultra low leakage: nA level
- * Case Material: "Green" Molding Compound.
- * UL Flammability Classification Rating 94V-0
- * Moisture Sensitivity: Level 3 per J-STD-020
- * Shipping Qty :8000 /7Inch Tape & Reel

Applications

- * Computers and peripherals
- * Audio and video equipment
- * Cellular handsets and accessories
- * Portable electronics

Dimensions and Pin Configuration



SOD723

Marking:E3

Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	150	W
Peak Pulse Current (8/20μs)	IPP	5	A
ESD per IEC 61000-4-2 (Air)	VESD	±30	kV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	VRWM				12	V
Breakdown Voltage	VBR	IT = 1mA(Pin1-Pin2)	13.5			V
Reverse Leakage Current	IR	VRWM = 12V(Pin2 -Pin1)			0.2	μA
Clamping Voltage	VC	IPP = 1A (8 x 20us pulse) (Pin1-Pin2)			8	V
Clamping Voltage	VC	IPP = 5A (8 x 20us pulse) (Pin1-Pin2)			28	V
Junction Capacitance	CJ	VR = 0V, f = 1MHz			30	pF

Characteristic Curves

Fig1. 8/20 μ s Pulse Waveform

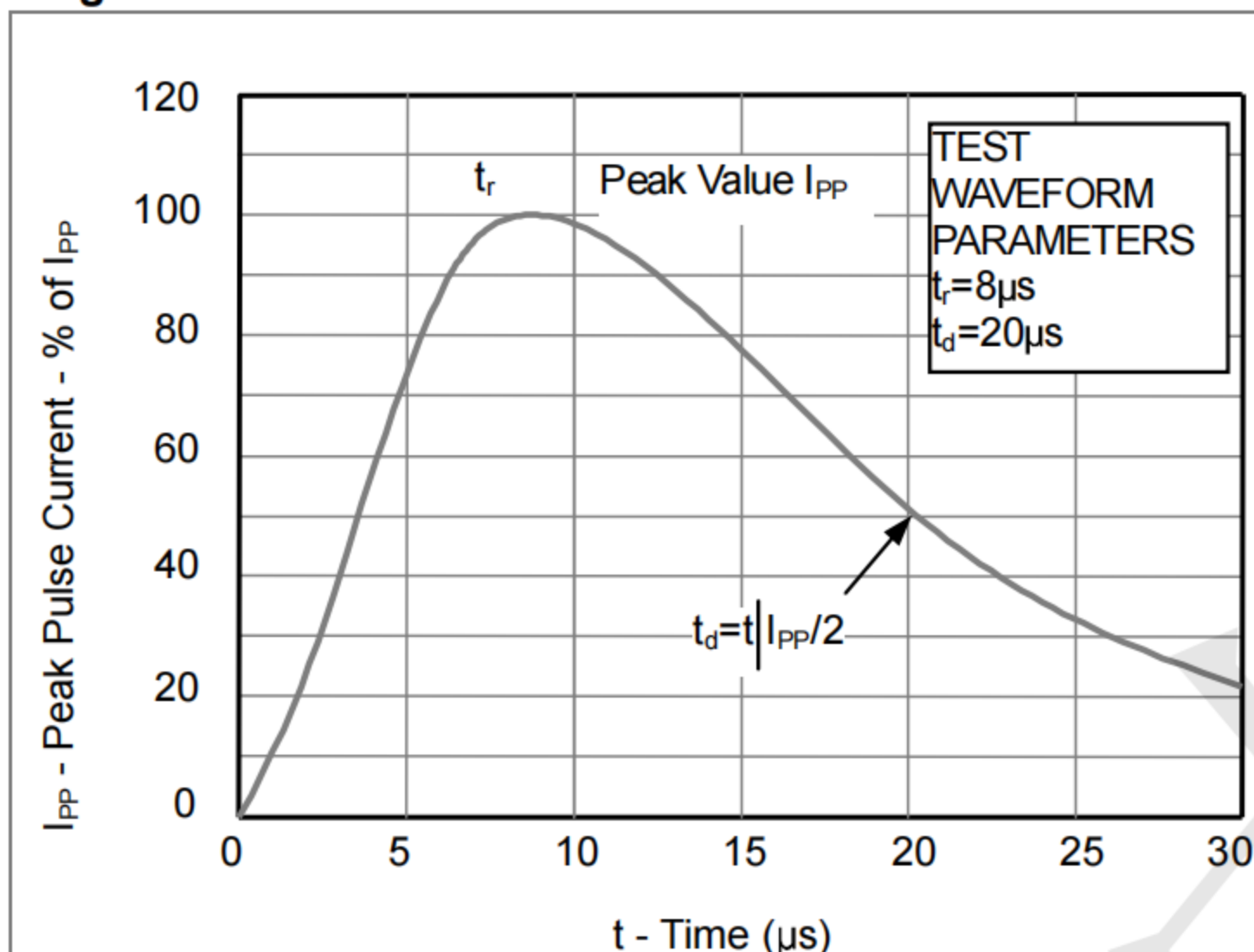


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

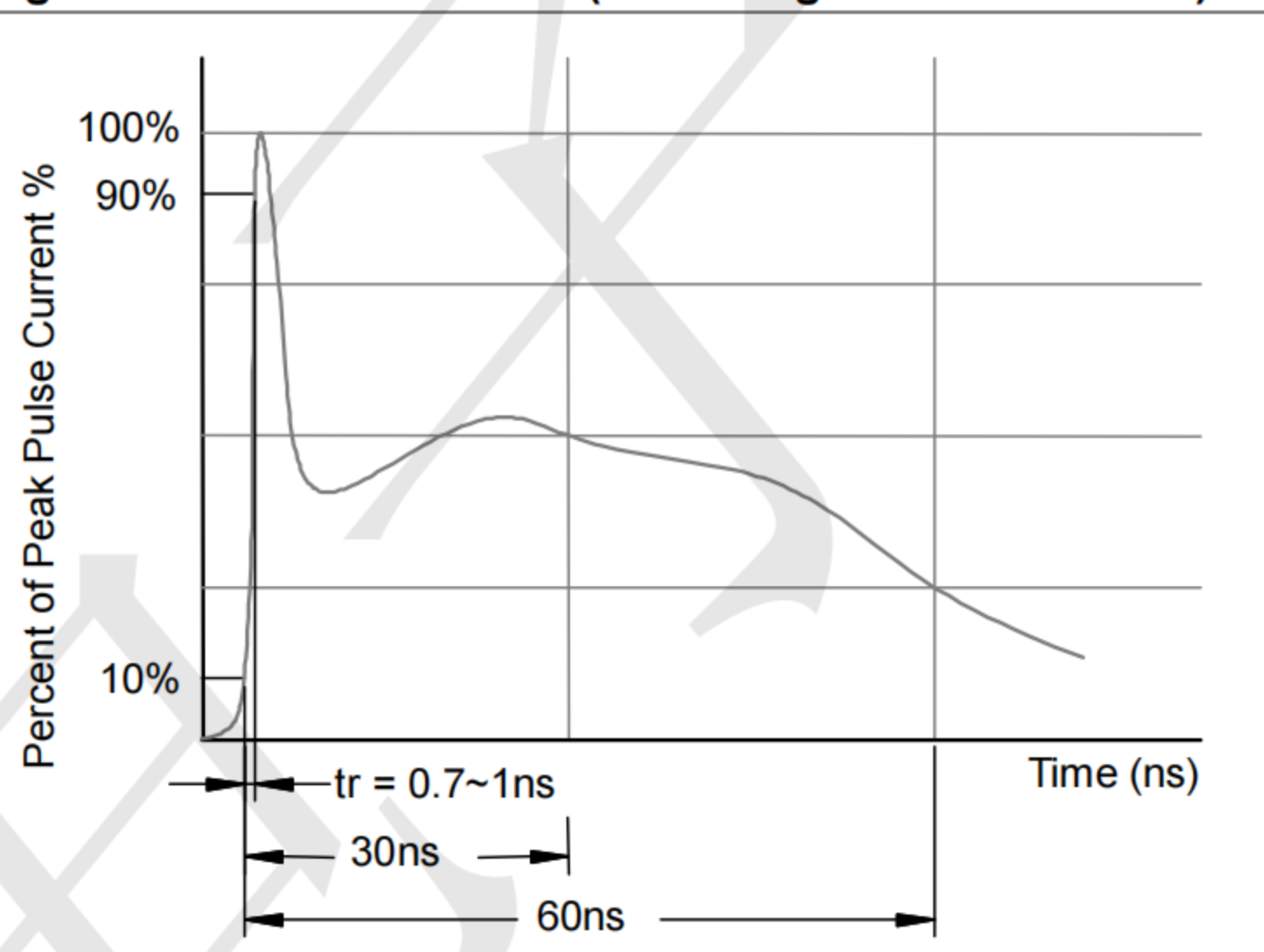
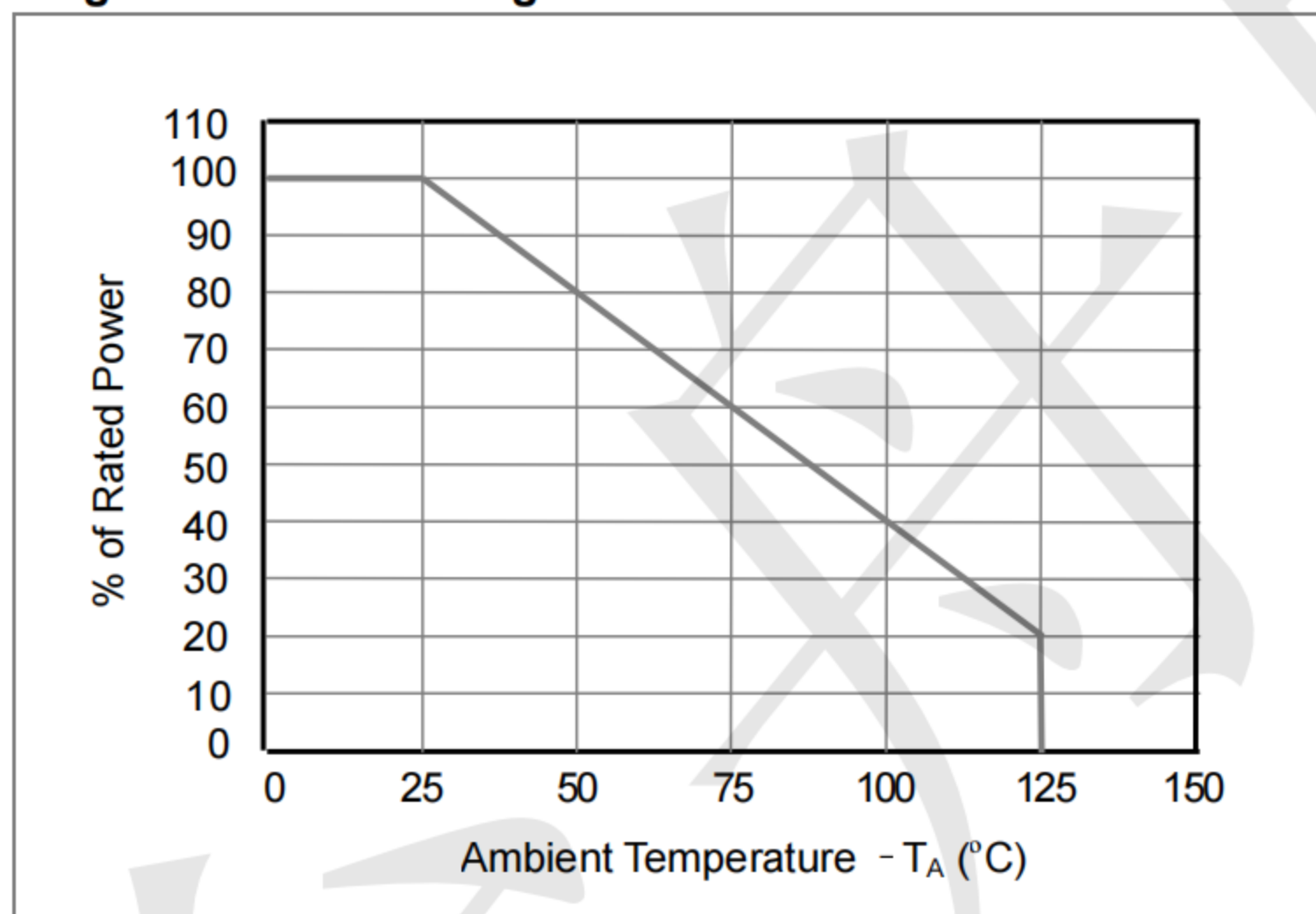
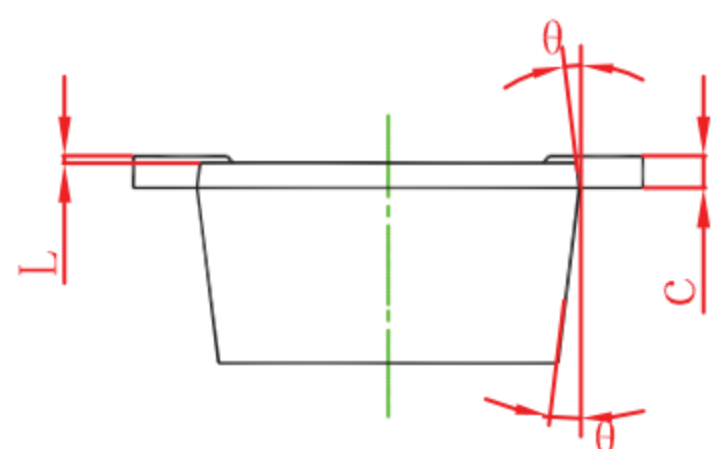
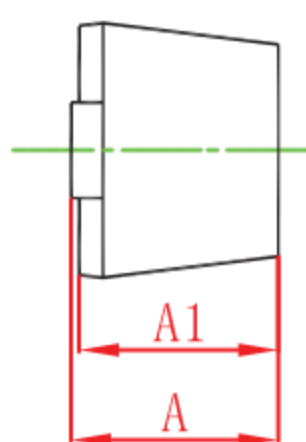
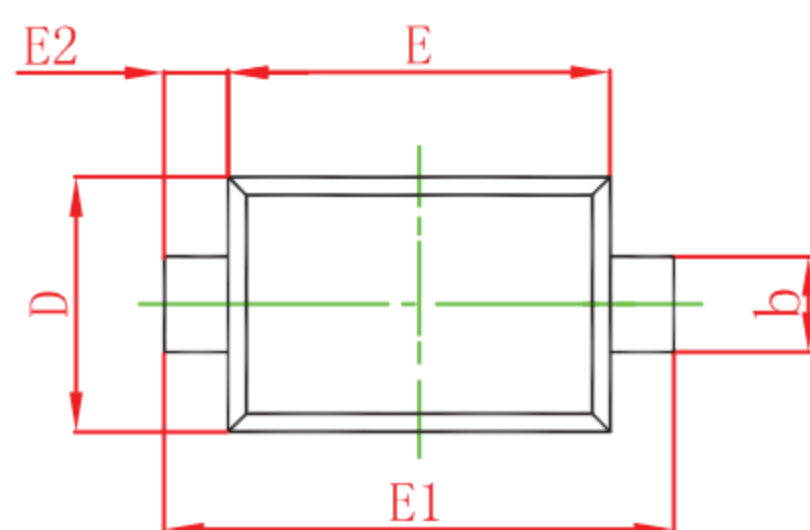


Fig3. Power Derating Curve

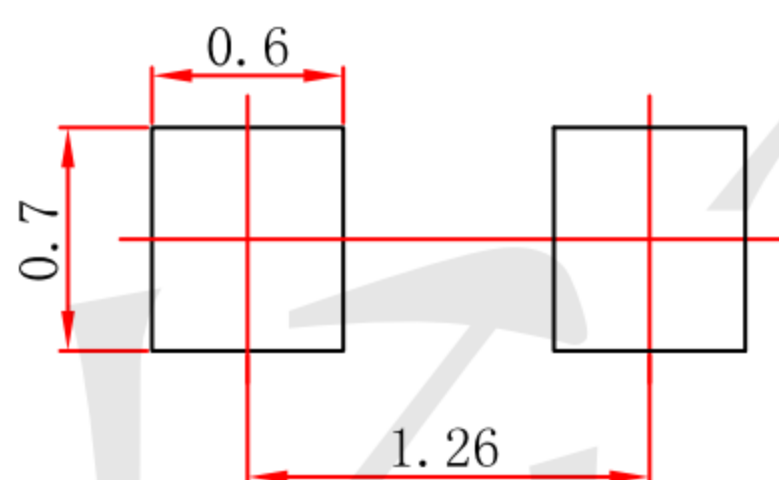


Outline Drawing - SOD-723 (unit: mm)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.525	0.650	0.021	0.026
A1	0.515	0.580	0.020	0.023
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.550	0.650	0.022	0.026
E	0.900	1.100	0.035	0.043
E1	1.300	1.500	0.051	0.059
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

Mounting Pad Layout-SOD723 (unit: mm)



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.