



Features

- 450 Watts peak pulse power per line($t_p=8/20\mu s$)
- Replacement for MLV (0805)
- Protects one power or I/O port
- Low clamping voltage
- Applied to the type 3V and 36V
- 61000-4-2 (ESD): Air 30kV, Contact 30kV



RoHS
COMPLIANT

SOD-323

Applications

- Laptop computers
- Cellular phones
- Digital cameras
- Personal digital assistant (PDA)



Mechanical Characteristics

- Molded JEDEC SOD-323
- Weight 6 milligrams (Approximate)

Maximum Ratings ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

Items	Symbol	Value	Unit
Peak pulse power($t_p=8/20\mu s$) at $T_L=25\text{ }^\circ\text{C}$	P_{PP}	450	W
Operating temperature range	T_j	-55 $^\circ\text{C}$ to 125 $^\circ\text{C}$	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 $^\circ\text{C}$ to 150 $^\circ\text{C}$	$^\circ\text{C}$

**Standard capacitance TVS diode
(For ESD protection)****Electrical Characteristics**

Part Number	Device Marking	Rated Stand-off Voltage V _{WM} Volts	Minimum Breakdown Voltage @ 1mA V (BR) Volts	Typical Clamping Voltage (See Fig.2) @ I _{PP} =1A V _c Volts	Maximum Clamping Voltage (See Fig.2) @8/20μs V _c @ I _{PP}	Maximum Leakage Current @V _{WM} I _D μA	Typical Capacitance @0V, 1MHz C _J pF
SD03C	3C	3.3	4.00	6.5	9.7V @ 46.7A	40.0	200
SD05C	5C	5.0	6.20	7.3	10.8V @ 41.7A	30.0	175
SD08C	8C	8.0	8.89	10.5	15.7V @ 28.7A	20.0	125
SD08.5C	8.5C	8.5	9.44	11.2	17.1V @ 26.4A	10.0	110
SD09C	9C	9.0	10.0	11.8	18.2V @ 24.8A	4.0	105
SD10C	10C	10	11.1	13.1	19.4V @ 23.3A	2.0	95
SD11C	11C	11	12.2	14.3	21.1V @ 21.4A	0.1	85
SD12C	12C	12	13.3	15.6	22.9V @ 19.7A	0.1	80
SD13C	13C	13	14.4	16.8	24.8V @ 18.2A	0.1	75
SD14C	14C	14	15.6	18.2	25.8V @17.5A	0.1	70
SD15C	15C	15	16.7	19.5	26.8V @ 16.8A	0.1	65
SD16C	16C	16	17.8	20.7	28.0V @ 16.1A	0.1	60
SD17C	17C	17	18.9	22.1	29.2V @ 15.4A	0.1	50
SD18C	18C	18	20.0	23.4	32.4V @ 13.9A	0.1	47
SD20C	20C	20	22.2	25.8	33.5V @ 13.5A	0.1	45
SD22C	22C	22	24.4	28.3	36.9V @ 12.2A	0.1	42
SD24C	24C	24	26.7	30.9	40.2V @ 11.2A	0.1	40
SD26C	26C	26	28.9	33.6	43.5V @ 10.4A	0.1	37
SD28C	28C	28	31.1	36.1	46.8V @ 9.7A	0.1	35
SD30C	30C	30	33.3	38.6	51.0V @ 8.9A	0.1	32
SD33C	33C	33	36.7	42.4	57.0V @ 7.9A	0.1	30
SD36C	36C	36	40.0	46.7	63.6V @ 7.1A	0.1	27



Characteristics Curves

Fig.1 Power Derating Curve

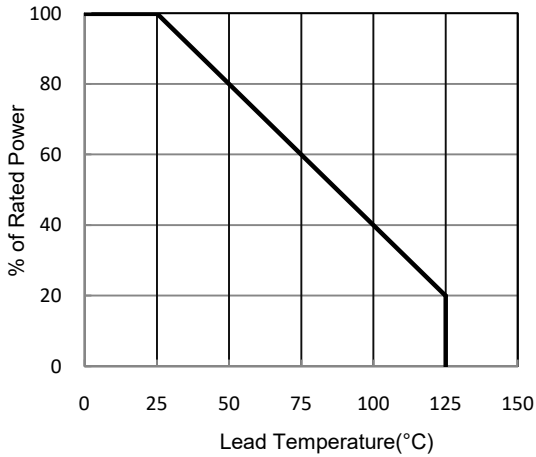


Fig 2. Peak Pulse Power vs. Pulse Time

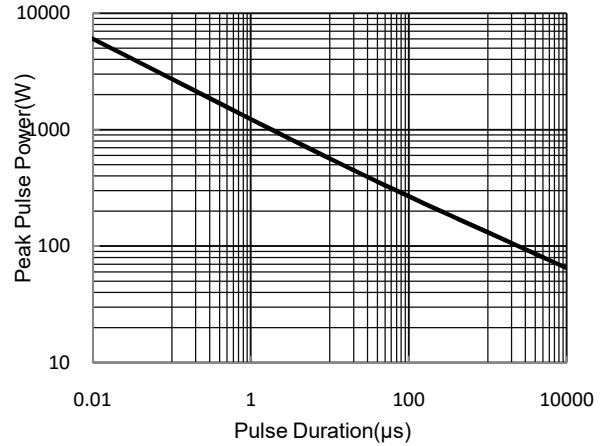
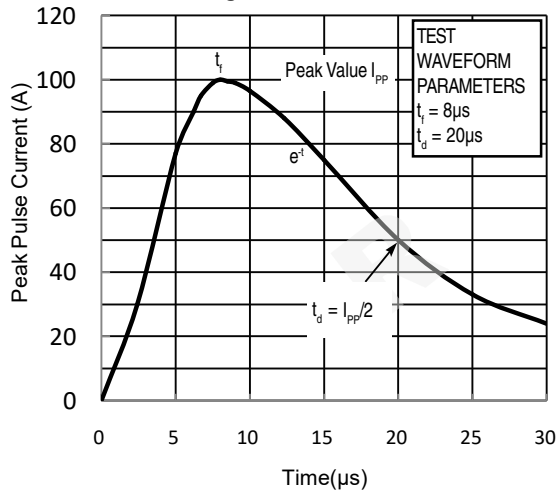


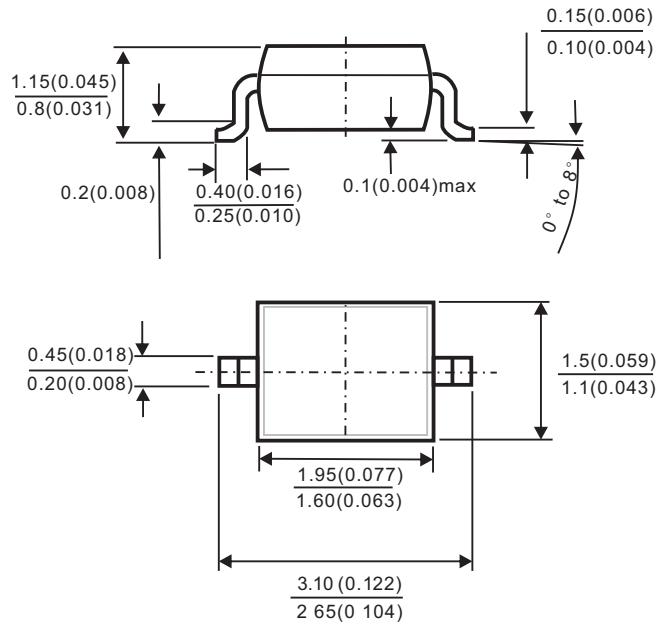
Fig3. Pulse Wave Form



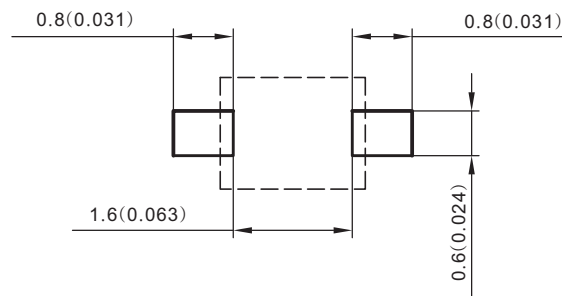


Package Outline

SOD-323



Footprint recommendation:



Package dimensions in millimeters (inches)

Ordering Information

Outline	Reel (PCS)	Per Carton (PCS)	Reel Diameters (mm)
Taping	3,000	240,000	178/7"

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