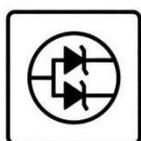


MSKSEMI 美森科

SEMICONDUCTOR



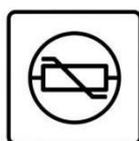
ESD



TVS



TSS



MOV



GDT



PLED

PESD1LIN-MS

Product specification

Features

- Ultra low leakage: nA level
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: ±25kV
 - Contact discharge: ±25kV
 - IEC61000-4-4 (EFT) 40A (5/50ns)
- RoHS Compliant
- AEC-Q101 qualified

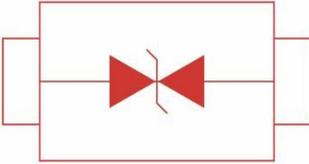
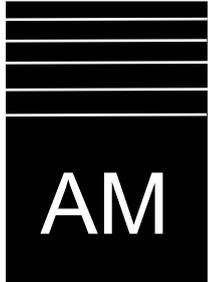
Applications

- USB 2.0 power and data line
- Set-top box and digital TV
- Digital video interface (DVI)
- Notebook Computers
- SIM Ports
- 10/100 Ethernet
- LIN BUS

Mechanical Characteristics

- Package: SOD-323
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel:3000pcs
- Reel Size:7 inch

Reference News

PACKAGE OUTLINE	Circuit Diagram	Marking
		
<p>SOD-323</p>		

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20µs)	Ppp	180	W
ESD per IEC 61000-4 -2 (Air)	VESD	± 20	Kv
ESD per IEC 61000-4 -2 (Contact)		± 20	
Operating Temperature Range	T _J	-55 to + 125	°C
Storage Temperature Range	T _{STJ}	-55 to + 150	°C

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

P/N	V _{RWM} (V)	V _{BR} (V)	I _T (mA)	V _C @1A	V _C		I _R µA (Max)	C (Pf) (Typ.)
					(Max)	(@A)		
PESD1LIN-MS	15	18.9	5	25	44	5	0.05	13
	24	27.8	5	40	70	3	0.05	13

Characteristic Curves

Fig 1. 8/20 μ s pulse waveform according to IEC 61000-4-5

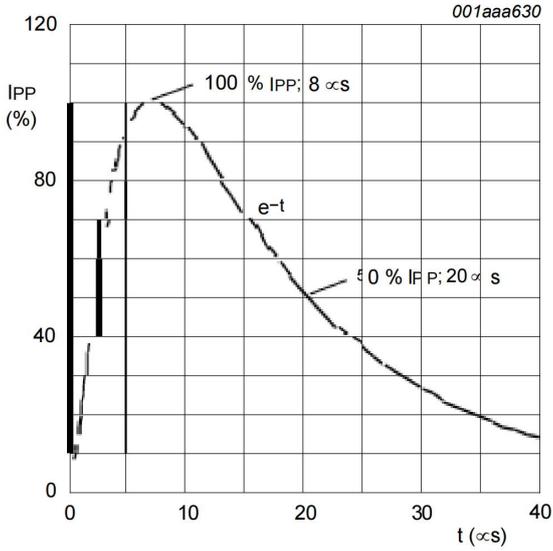


Fig 2. ESD pulse waveform according to IEC 61000-4-2

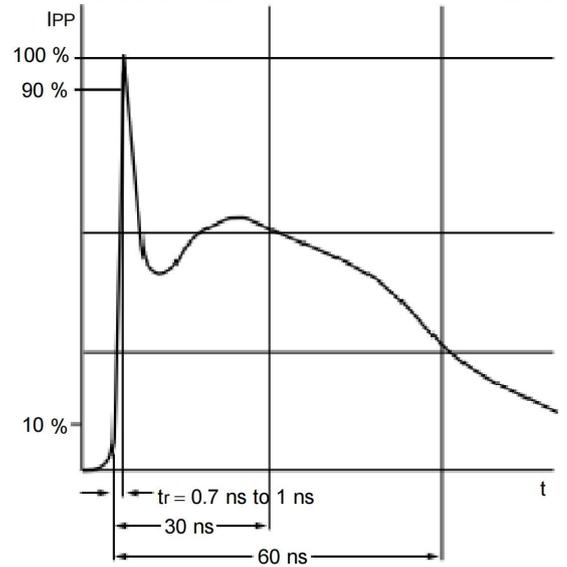
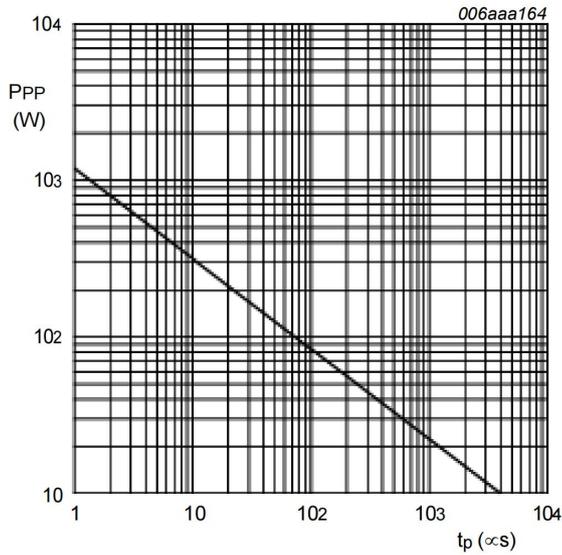
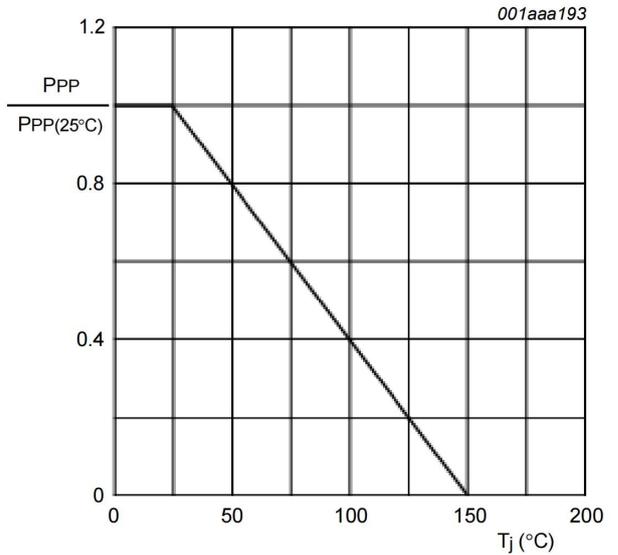


Fig 3. Peak pulse power as a function of exponential pulse duration; typical values

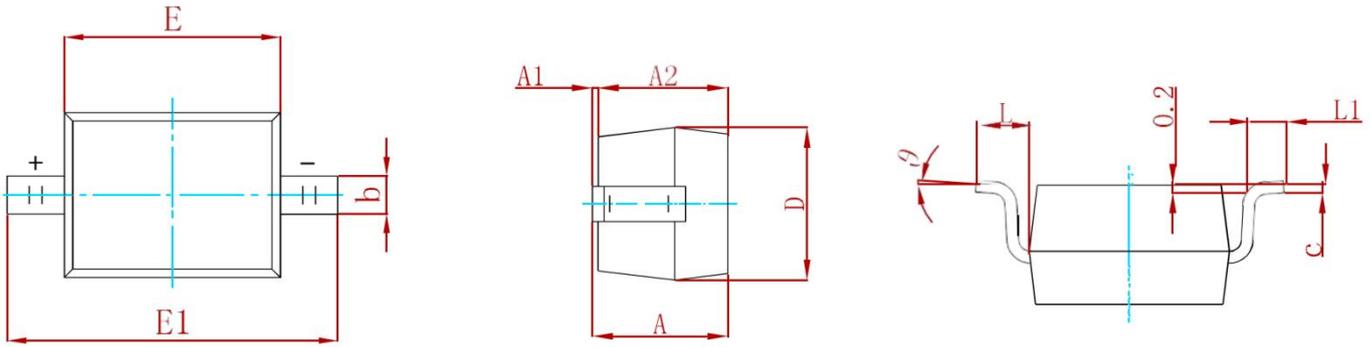


$T_{amb} = 25^\circ C$

Fig 4. Relative variation of peak pulse power as a function of junction temperature; typical values

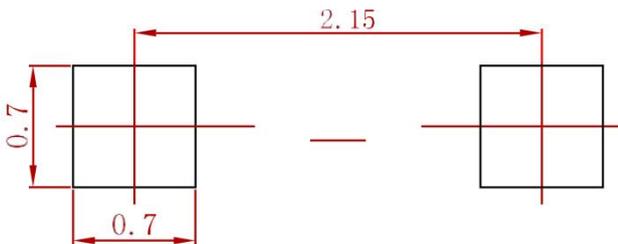


PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min.	Max
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
C	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:

- 1.Controlling dimension:in millimeters.
- 2.General tolerance:±0.05mm.
- 3.The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
PESD1LIN-MS	SOD-323	3000

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