

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

CESDXXD1-MS

Product specification

FEATURES

- IEC61000-4-4 (EFT) 40A (5/50qs)
- 350 Watts Peak Pulse Power per (tp=8/20ps)
- Protects one I/O line (unidirectional)
- Low clamping voltage
- Working voltages : 3.3V to 36V
- Low leakage current


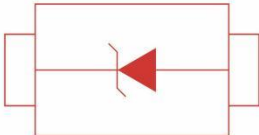
MACHANICAL DATA

- SOD-323 package
- Flammability Rating: UL 94V-0
- Packaging: Tape and Reel
- High temperature soldering guaranteed:260°C/10s
- Reel size: 7 inch
- MSL 1

APPLICATIONS

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Networking and Telecom
- Serial and Parallel Ports
- Peripherals

Reference News

PACKAGE OUTLINE	PIN CONFIGURATION
	
SOD-323	

Marking for the SDXX-MS series

VRWM	3.3V	5V	8V	12V	15V	18V	20V	24V	36V
Marking	03W	05W	08W	12W	15W	18W	20W	24W	36W

ABSOLUTE MAXIMUM RATING

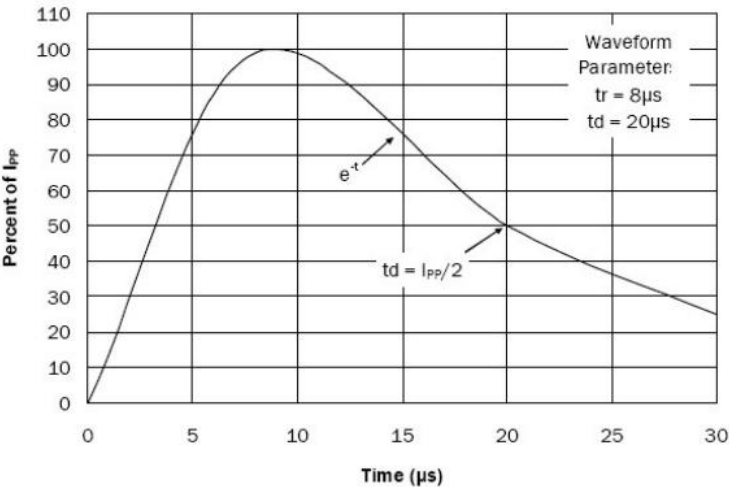
Symbol	Parameter	Value	Units
VESD	ESD per IEC 61000-4-2 (Air)	±15	kV
	ESD per IEC 61000-4-2 (Contact)	±8	
Ppp	Peak Pulse Power (8/20 μ s)	350	W
T _{OPT}	Operating Temperature	-55/+150	°C
T _{STG}	Storage Temperature	-55/+150	°C
TL	Lead Soldering Temperature	260 (10 sec.)	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C)

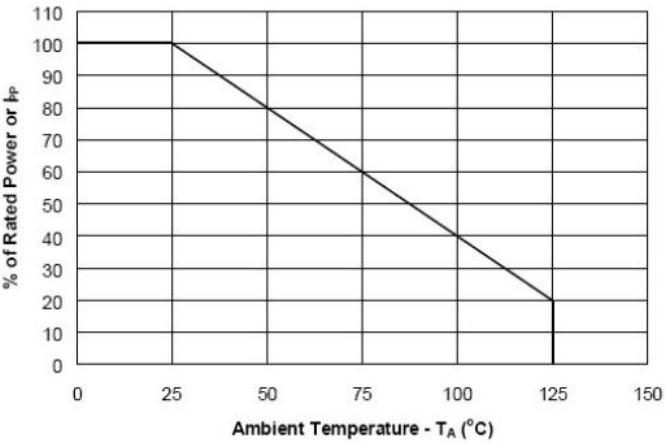
PART NUMBER	DEVICE MARKING	VRWM (V) (max.)	VB (V) (min.)	IT (mA)	Vc@1A (V) (max.)	Vc (V)		IR (mA) (max.)	CT (pF) (max.)
						(max.)	(@A)		
CESD3V0D1-MS	03W	3.3	4	1	6.5	14	20	40	450
CESD5V0D1-MS	05W	5	6	1	9.8	18	17	10	300
CESD8V0D1-MS	08W	8	8.5	1	10.5	24	15	1	240
CESD12VD1-MS	12W	12	13.3	1	19	32	11	1	130
CESD15VD1-MS	15W	15	16.7	1	24	38	10	1	120
CESD18VD1-MS	18W	18	20.0	1	29	45	9	1	100
CESD20VD1-MS	20W	20	22.3	1	35	50	8	1	90
CESD24VD1-MS	24W	24	26.7	1	43	52	7	1	80
CESD36VD1-MS	36W	36	40	1	60	75	5	1	60

ELECTRICAL CHARACTERISTICS CURVE

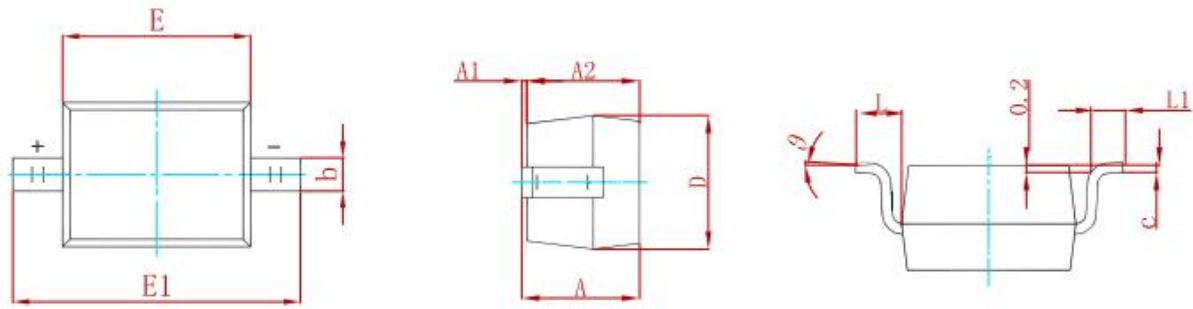
Pulse Waveform



Power Derating Curve

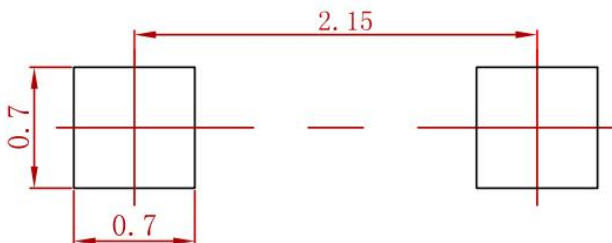


PACKAGE MECHANICAL DATA



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: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
CESDXXXD1-MS	SOD-323	3000

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