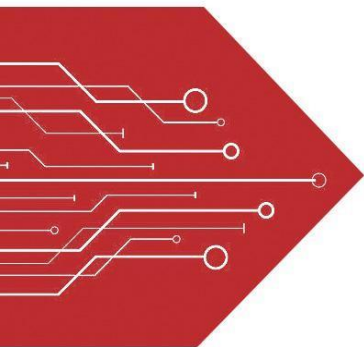


# MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



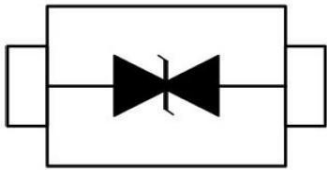
GDT



PLED

Product data sheet

## PIN CONFIGURATION



**SOD-323**

## FEATURES

- IEC61000-4-2 (ESD)  $\pm 30\text{kV}$  (Contact)  
 $\pm 30\text{kV}$  (Air)
- ◇ IEC61000-4-4 (EFT) 40A (5/50ns)
- ◇ 350 Watts Peak Pulse Power per (tp=8/20μs)
- ◇ Protects one I/O line (bidirectional)
- ◇ Low clamping voltage
- ◇ Working voltages:  
3.3V, 5V, 8V, 12V, 15V, 18V, 20V, 24V, 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

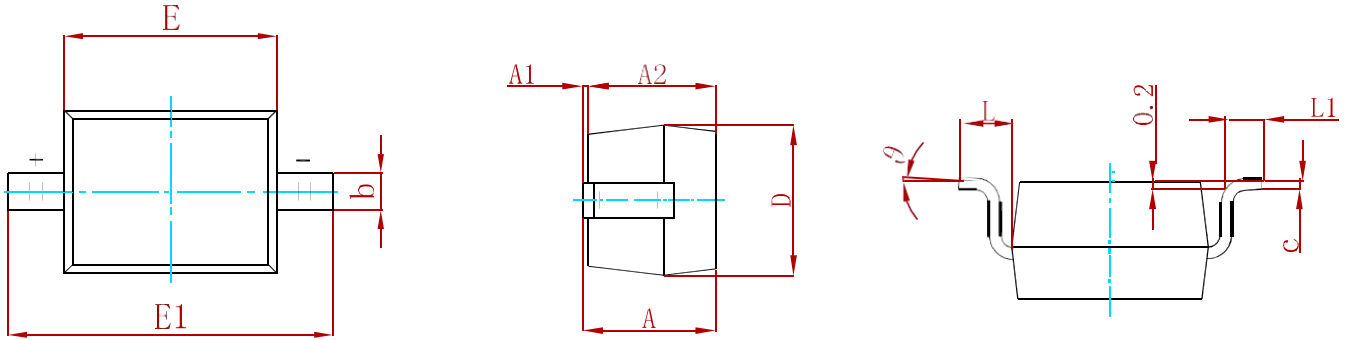
## APPLICATIONS

- ◇ 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

ABSOLUTE MAXIMUM RATING			
Symbol	Parameter	Value	Units
$V_{ESD}$	ESD per IEC 61000-4-2 (Contact)	±30	kV
	ESD per IEC 61000-4-2 (Air)	±30	
$P_{PP}$	Peak Pulse Power (8/20 $\mu$ s)	350	W
$T_{OPT}$	Operating Temperature	-55/+150	°C
$T_{STG}$	Storage Temperature	-55/+150	°C
$T_L$	Lead Soldering Temperature	260 (10 sec.)	°C

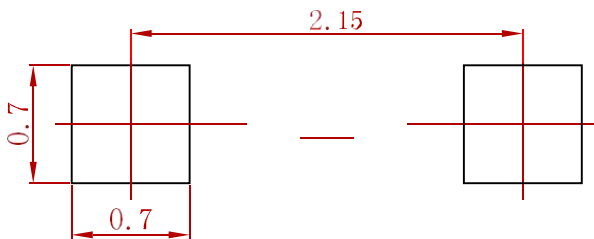
ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}C$ )									
P/N	MARK	$V_{RWM}$ (V) (max.)	$V_B$ (V) (min.)	$I_T$ (mA)	$V_C@1A$ (V) (max.)	$V_C$ (V) (max.) (@A)		$I_R$ ( $\mu$ A) (max.)	$C_T$ (pF) (max.)
SD03C-MS	2A	3.3	4.0	1	7.5	16.0	20	40	450
SD05C-MS	2B	5.0	6.0	1	9.8	18.0	17	10	200
SD08C-MS	2C	8.0	8.5	1	13.4	24.0	15	2	120
SD12C-MS	2D	12.0	13.3	1	19.0	32.0	11	1	75
SD15C-MS	2J	15.0	16.7	1	24.0	38.0	10	1	68
SD18C-MS	2K	18.0	20.0	1	29.0	45.0	9	1	57
SD20C-MS	2L	20.0	22.3	1	35.0	50.0	8	1	52
SD24C-MS	2H	24.0	26.7	1	43.0	52.0	7	1	50
SD36C-MS	2N	36.0	40.0	1	60.0	75.0	4.5	1	35

**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
SDXXC-MS	SOD-323	3000

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