

# DSMXXC Series

## DSMXXC Series Bi-directional TVS Diode Array

### General description

Bi-directional TVS Diode Array  
in a SOT-23 Package.

### FEATURES

- Low clamping voltage
- Low leakage current
- Working voltages : 3.3V to 36V
- Protects two bidirectional lines

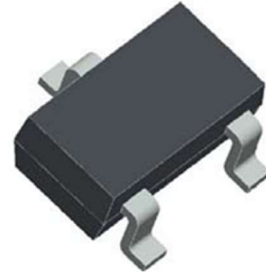
### APPLICATIONS:

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

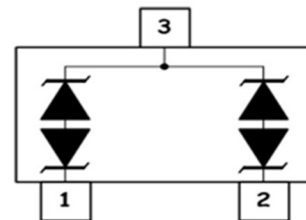
### MACHANICAL DATA

- SOT-23 package
- Flammability Rating: UL 94V-0
- MSL1
- High temperature soldering guaranteed:260°C/10s

### Package Outline



### SOT-23 Package



### PIN CONFIGURATION

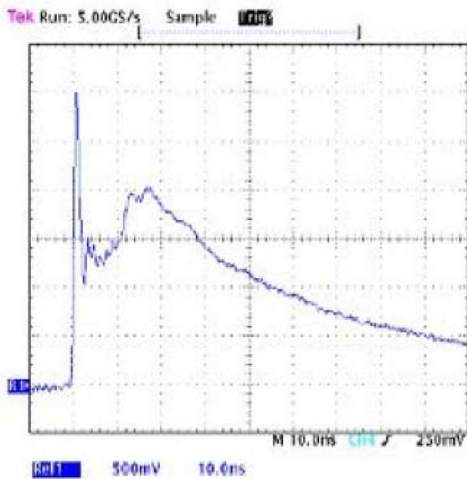
### ABSOLUTE MAXIMUM RATING

Symbol	Parameter	Value	Units
V <sub>ESD</sub>	ESD per IEC 61000-4-2 (Air)	±15	kV
	ESD per IEC 61000-4-2 (Contact)	±8	
P <sub>PP</sub>	Peak Pulse Power (8/20µs)	350	W
T <sub>OPT</sub>	Operating Temperature	-55~150	°C
T <sub>STG</sub>	Storage Temperature	-55~150	°C
TL	Lead Soldering Temperature	260	°C

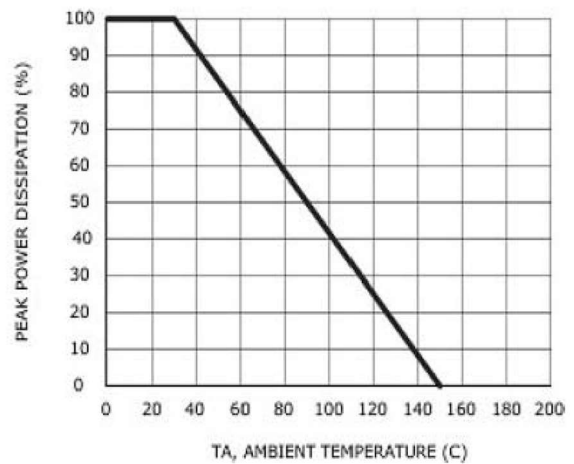
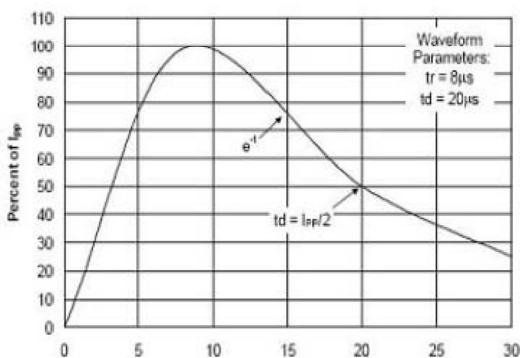
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ELECTRICAL CHARACTERISTICS (Tamb=25°C)									
PART NUMBER	DEVICE MARKING	V <sub>RWM</sub> (V) (max.)	V <sub>B</sub> (V) (min.)	I <sub>T</sub> (mA)	V <sub>C@1A</sub> (V) (max.)	V <sub>C</sub> (V) (max.) (@A)		I <sub>R</sub> (μA) (max.)	C <sub>J</sub> (pF) (max.)
DSM03C	C03	3.3	4.0	1	7.5	16.0	20	40	450
DSM05C	C05	5.0	6.0	1	9.8	18.0	17	10	200
DSM08C	C08	8.0	8.5	1	13.4	24.0	15	2	120
DSM12C	C12	12.0	13.3	1	19.0	32.0	11	1	75
DSM15C	C15	15.0	16.7	1	24.0	38.0	10	1	68
DSM18C	C18	18.0	20.0	1	29.0	45.0	9	1	57
DSM20C	C20	20.0	22.3	1	35.0	50.0	8	1	52
DSM24C	C24	24.0	26.7	1	43.0	52.0	7	1	50
DSM36C	C36	36.0	40.0	1	60.0	75.0	4.5	1	35

## Typical Characteristic:

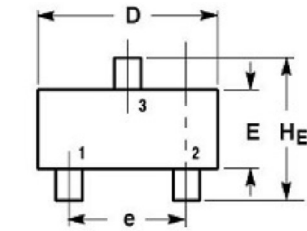


Pulse Waveform

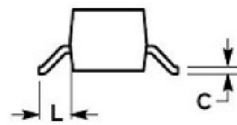
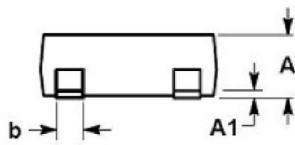


Power Derating Curve

## SOT-23 PACKAGE OUTLINE DIMENSIONS



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1.00	1.11	0.035	0.040	0.044
A1	0.01	0.06	0.10	0.001	0.002	0.004
b	0.37	0.44	0.50	0.015	0.018	0.020
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.90	3.04	0.110	0.114	0.120
E	1.20	1.30	1.40	0.047	0.051	0.055
e	1.78	1.90	2.04	0.070	0.075	0.081
L	0.35	0.54	0.69	0.014	0.021	0.029
HE	2.10	2.40	2.64	0.083	0.094	0.104



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