

### Surface Mount TVS Diode Array for ESD Protection

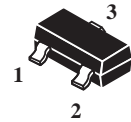
 Lead(Pb)-Free

#### Features:

- \* Transient Protection for data lines as per IEC 61000-4-2(ESD)15KV(air), 8KV(contact)
- \* 300 Watts Peak Power Protection. ( $t_p=8/20\mu S$ )
- \* Protects Two Unidirectional Lines with pin3 used as a common anode Connection or One Bidirectional Line between pin1 & pin2
- \* Low Leakage Current
- \* Excellent Clamping Capability

#### TRANSIENT VOLTAGE SUPPRESSORS

**300 WATTS  
4-15 VOLTS**



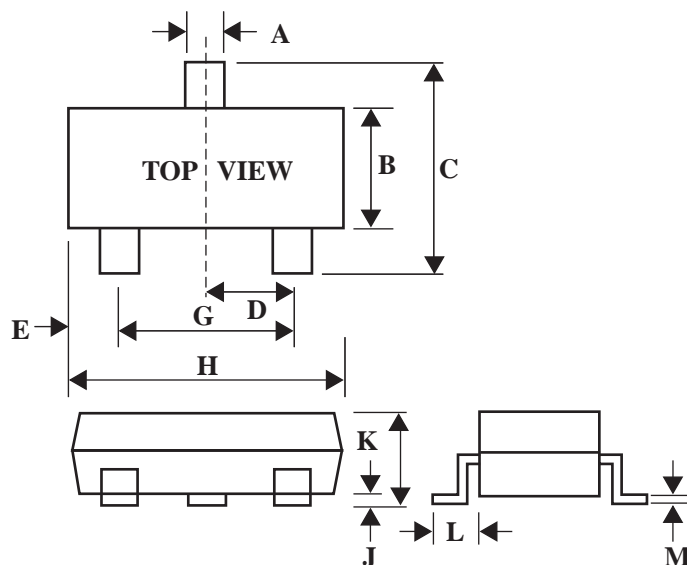
**SOT-23**

#### Mechanical Data:

- \* Case : Molded Epoxy
- \* Marking : Marking Code
- \* Weight : 0.008 grams(approx)

### SOT-23 Outline Dimensions

Unit:mm



Dim	Min	Max
A	0.35	0.51
B	1.19	1.40
C	2.10	3.00
D	0.85	1.05
E	0.46	1.00
G	1.70	2.10
H	2.70	3.10
J	0.01	0.13
K	0.89	1.10
L	0.30	0.61
M	0.076	0.25

**Maximum Ratings( $T_A=25^{\circ}\text{C}$  Unless Otherwise Noted)**

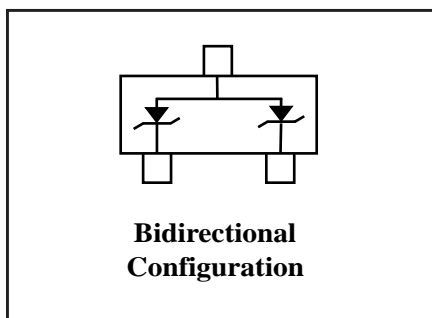
Characteristic	Symbol	Vote	Unit
Peak Pulse Power Dissipation ( $t_p = 8/20\mu\text{s}$ )	$P_{PK}$	300	W
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556	$^{\circ}\text{C}/\text{W}$
Lead Soldering Temperature	$T_L$	260(10s)	$^{\circ}\text{C}$
Operating Temperature Range	$T_J$	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to +150	$^{\circ}\text{C}$

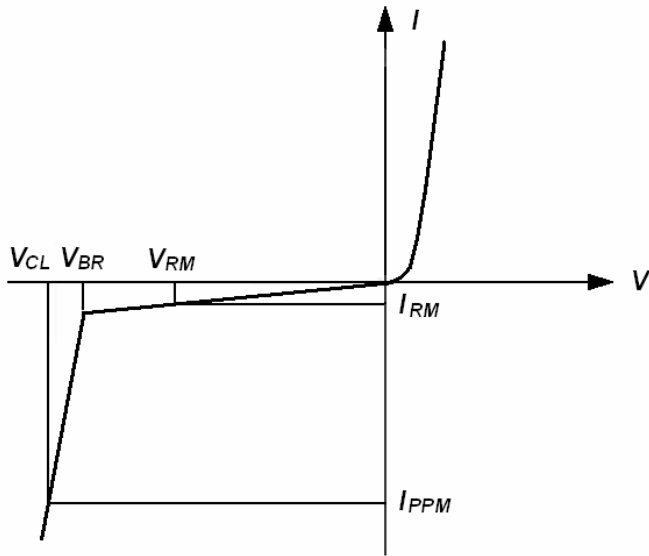
**Electrical Characteristics**

Part Numbers	Rated Stand-off Voltage	Maximum Leakage Current	Minimum Breakdown Voltage	Maximum Clamping Voltage		Maximum Pulse Peak Current	Maximum Capacitance
		@ $V_{RM}$	1mA	1A <sup>1</sup>	5A <sup>1</sup>	$t_p=8/20\mu\text{s}$	0v, 1MHz
	$V_{RM}$	$I_{RM}$	$V_{BR}$	$V_{CL}$		$I_{PPM}$	C
	V	$\mu\text{A}$	V	V	V	A	pF
WOST04C	4.0	20.0	5.0	8.5	10.5	17	300
WOST05C	5.0	20.0	6.0	9.8	12.5	17	220
WOST08C	8.0	5.0	8.5	13.4	15.0	15	190
WOST12C	12.0	1.0	13.3	19.0	28.0	12	90
WOST15C	15.0	1.0	16.7	24	39.0	10	60

1. 8/20 waveform used. (see fig2.)

**Equivalent Circuit Diagram:**

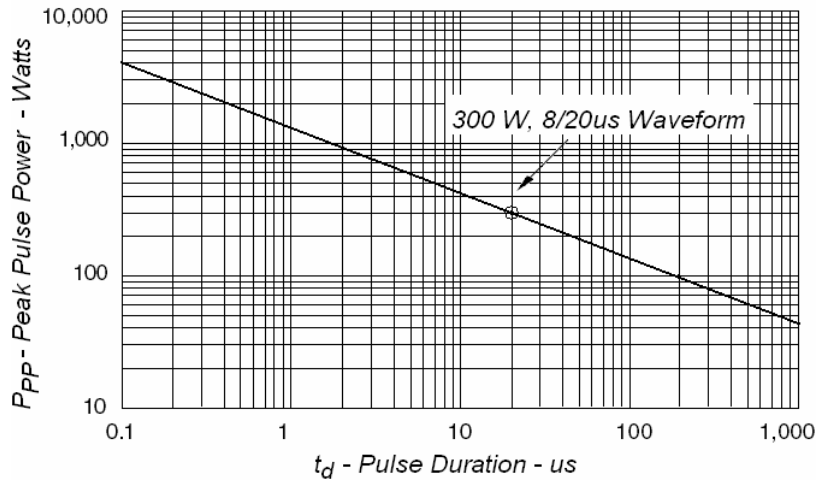




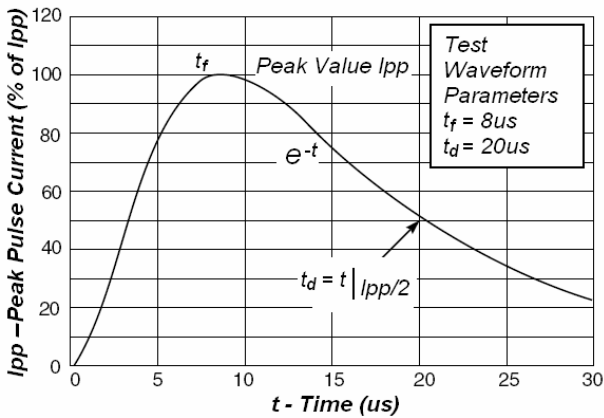
**Electrical Parameter**

Symbol	Parameter
$V_{RM}$	Stand-off voltage
$V_{BR}$	Breakdown voltage
$V_{CL}$	Clamping voltage
$I_{RM}$	Leakage current
$I_{PPM}$	Peak pulse current

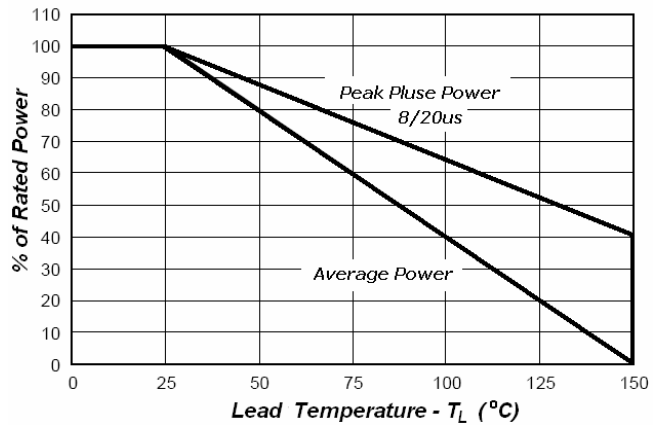
**Typical Characteristics**



**Fig1. Peak Pulse Power VS Pulse Time**



**Fig2. Pulse Waveform**



**Fig3. Power Derating**