WEITRON

WOST04C thru WOST15C

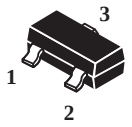
Surface Mount TVS Diode Array for ESD Protection

TRANSIENT VOLTAGE SUPPRESSORS
300 WATTS
4-15 VOLTS

Pb 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. (tp=8/20μS)
* 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



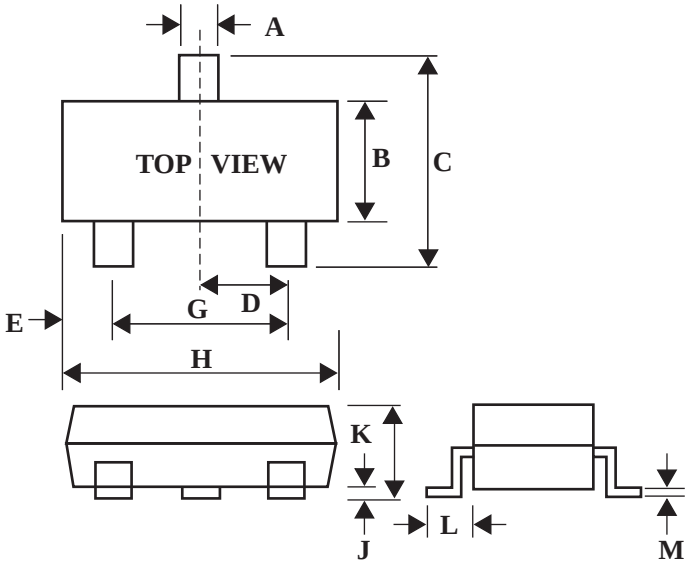
SOT-23

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°C Unless Otherwise Noted)

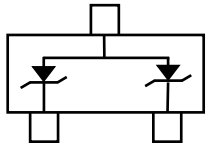
Characteristic	Symbol	Votle	Unit
Peak Pulse Power Dissipation (t_P = 8/20μs)	P_{PK}	300	W
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556	°C/W
Lead Soldering Temperature	T_L	260(10s)	°C
Operating Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{stg}	-55 to +150	°C

Electrical Characteristics

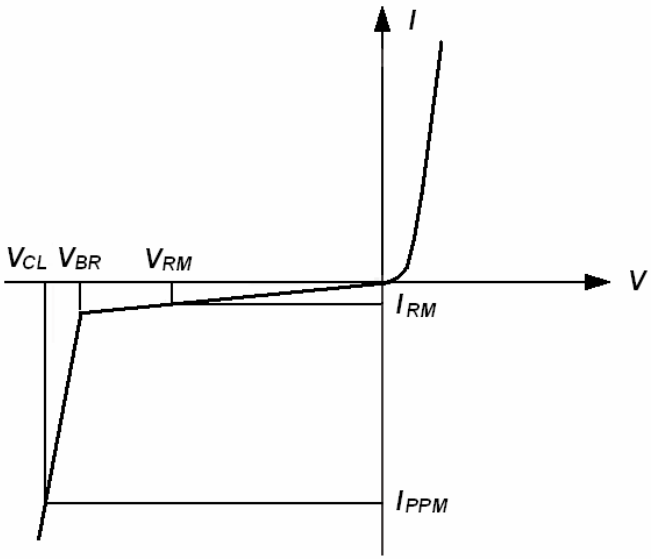
Part Numbers	Rated Stand-off Voltage	Maximum Leakage Current	Minimum Breakdown Voltage	Maximum Clamping Voltage		Maximum Pulse Peak Current	Maximum Capacitance
		@ V_{RM}	1mA	1A[1]	5A[1]	tp=8/20us	0v, 1MHz
	V_{RM}	I_{RM}	V_{BR}	V_{CL}		I_{PPM}	C
	V	μA	V	V	V	A	pF
WOST04C	4.0	20.0	5.0	8.5	10.5	17	300
WOST05C	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.)

Eqivalent Circuit Diagram:



Bidirectional Configuration



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

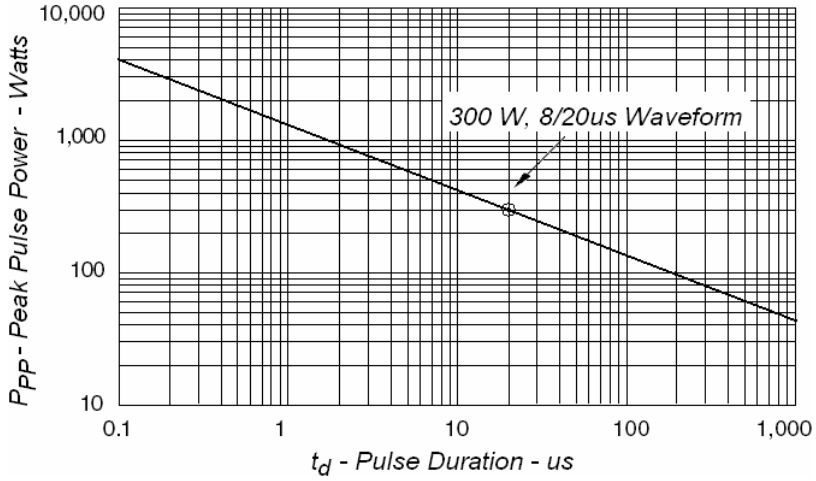


Fig1. Peak Pulse Power VS Pulse Time

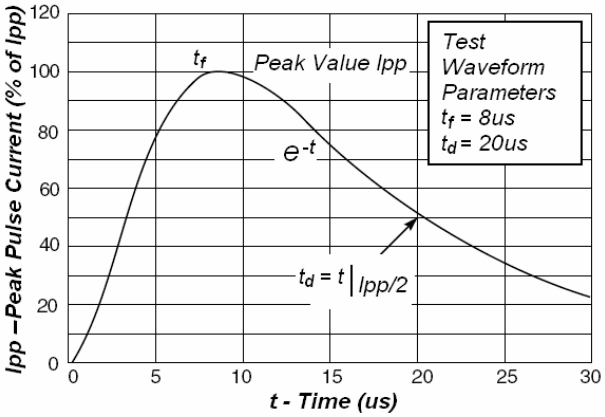


Fig2. Pulse Waveform

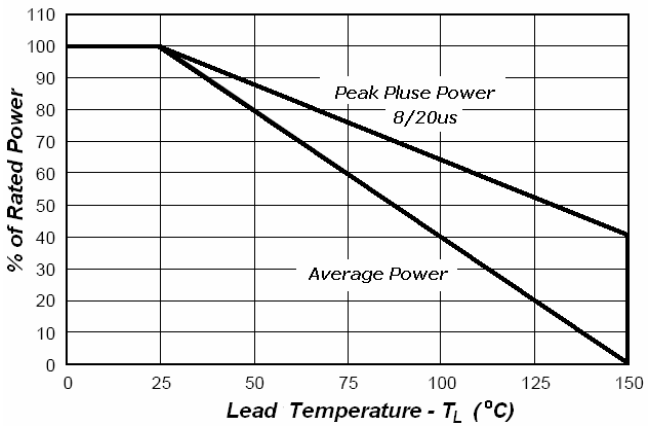


Fig3.Power Derating