

Low Capacitance TVS Diode Array

APPLICATIONS

- ◆ RS-232, RS-422 & RS-423 Data Lines
- ◆ Audio/Video Inputs
- ◆ Wireless Network Systems
- ◆ Digit Video Interface (DVI)
- ◆ Medical Sensors
- ◆ Notebook Computers

IEC COMPATIBILITY

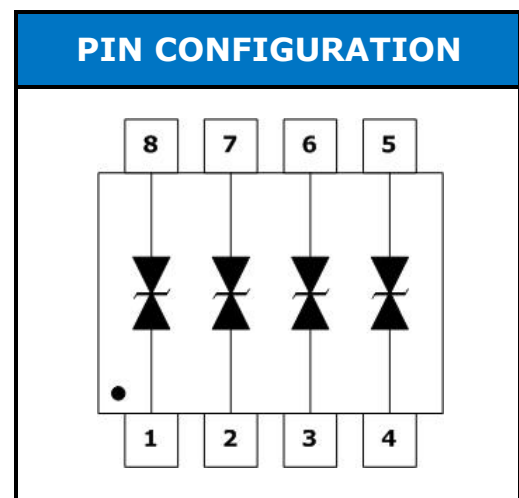
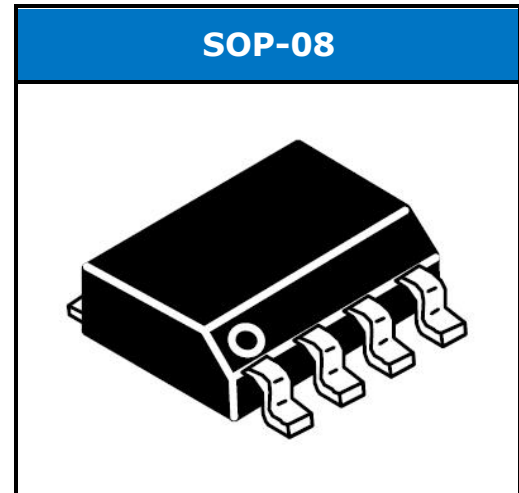
- ◆ IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50 η s)
- ◆ IEC61000-4-5 (Lightning) 12A (8/20 μ s)

FEATURES

- ◆ 500 Watts Peak Pulse Power per Line ($t_p=8/20\mu\text{s}$)
- ◆ Protects four bidirectional I/O lines
- ◆ Low clamping voltage
- ◆ Working voltages : 3.3V, 5V, 12V, 15V and 24V
- ◆ Low leakage current

MECHANICAL CHARACTERISTICS

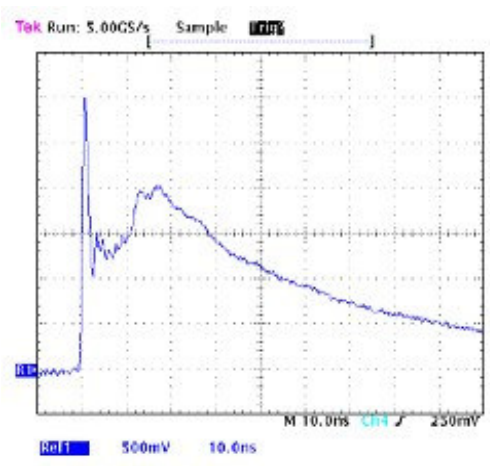
- ◆ JEDEC SOP-08 Package
- ◆ Molding Compound Flammability Rating : UL 94V-0
- ◆ Weight 70 Milligrams (Approximate)
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Reel Size : 13 inch
- ◆ Lead Finish : Lead Free



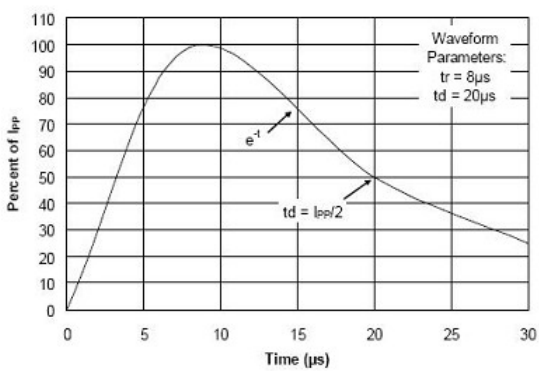
DEVICE CHARACTERISTICS

MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20µs waveform)	P _{PP}	500	Watts
Lead Soldering Temperature	T _L	260 (10 sec.)	°C
Operating Temperature Range	T _J	-55 ~ 150	°C
Storage Temperature Range	T _{STG}	-55 ~ 150	°C

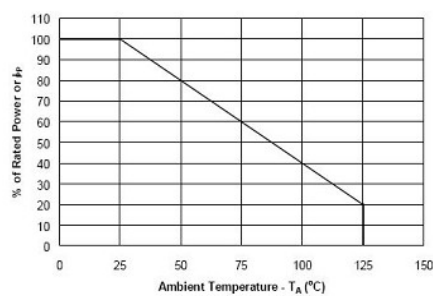
ELECTRICAL CHARACTERISTICS PER LINE (@ 25°C Unless Otherwise Specified)									
PART NUMBER	DEVICE MARKING	V _{RWM}	V _B	I _T	V _C	V _C		I _R	C _T
		(V) (max.)	(V) (min.)	(mA)	@1A (max.)	(max.)	(@A)	(µA) (max.)	(pF) (max.)
TESD03K4B	SMDA 33C	3.0	4.0	1	6.5	10.9	5	75	450
TESD05K4B	SMDA 05C	5.0	6.0	1	9.8	13.5	5	5	300
TESD12K4B	SMDA 12C	12.0	13.3	1	19.0	25.9	5	1	100
TESD15K4B	SMDA 15C	15.0	16.7	1	24.0	30.0	5	1	80
TESD24K4B	SMDA 24C	24.0	26.7	1	43.0	49.0	5	1	50



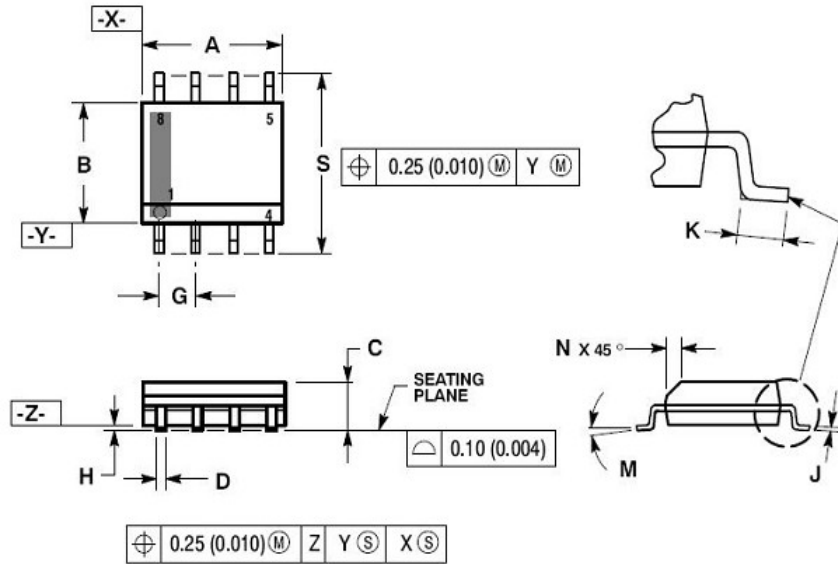
Pulse Waveform



Power Derating Curve



SOP-08 PACKAGE OUTLINE & DIMENSIONS



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	4.80	5.00	0.189	0.197
B	3.80	4.00	0.150	0.157
C	1.35	1.75	0.053	0.069
D	0.33	0.51	0.013	0.020
G	1.27 BSC		0.050 BSC	
H	0.10	0.25	0.004	0.010
J	0.19	0.25	0.007	0.010
K	0.40	1.27	0.016	0.050
M	0° 8°		0° 8°	
N	0.25	0.50	0.010	0.020
S	5.80	6.20	0.228	0.244

*** SOLDERING FOOTPRINT**

