



# SD03 THRU SD36

## STANDARD CAPACITANCE TVS ARRAY / ESD ARRAY

### APPLICATIONS

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



### IEC COMPATIBILITY

- IEC61000-4-2 (ESD)  $\pm 15\text{kV}$  (air),  $\pm 8\text{kV}$  (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (Lightning) 24A (8/20 $\mu\text{s}$ )

### FEATURES

- 500 Watts Peak Pulse Power per Line ( $t_p=8/20\mu\text{s}$ )
- Protects one I/O or power line
- Low clamping voltage
- Working voltages: 3.3V, 5V, 12V, 15V, 24V, 36V
- Low leakage current

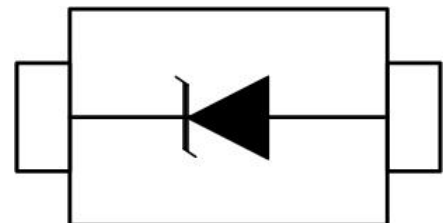
### MECHANICAL CHARACTERISTICS

- JEDEC SOD-323 Package
- Molding Compound Flammability Rating : UL 94V-0
- Weight 5 Milligrams (Approximate)
- Quantity Per Reel : 3,000pcs
- Reel Size : 7 inch
- Lead Finish : Lead Free

### PACKAGE : SOD-323



### PIN CONFIGURATION



UNIDIRECTIONAL



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## STANDARD CAPACITANCE TVS ARRAY / ESD ARRAY

### DIVICE CHARACTERISTIC

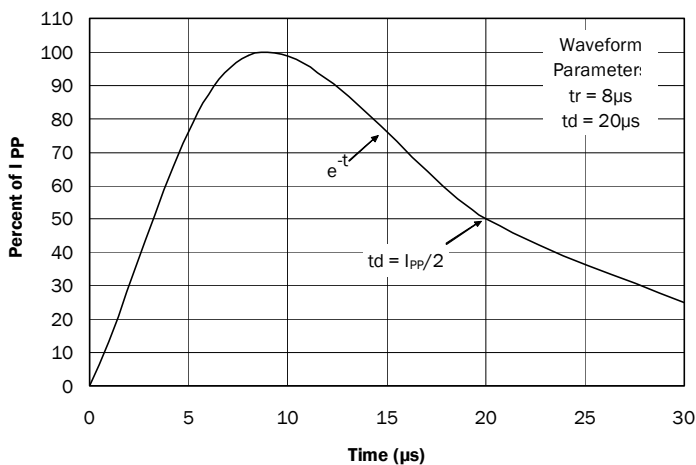
#### MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20μs waveform)	PPP	500	Watts
Lead Soldering Temperature	T <sub>L</sub>	260 (10 sec.)	°C
Operating Temperature Range	T <sub>J</sub>	-55 ~ 150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ 150	°C

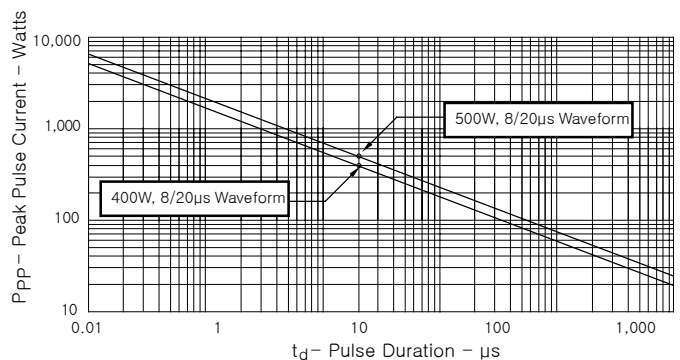
#### ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER	V <sub>RWM</sub>	V <sub>B</sub>	I <sub>T</sub>	V <sub>C</sub>	V <sub>C</sub>		I <sub>R</sub>	C <sub>T</sub>
	(V) (max.)	(V) (min.)	(mA)	@1mA (max.)	(max.)	(@A)	(μA) (max.)	(pF) (max.)
SD03	3.3	4	1	6.5	10.9	30	40	500
SD05	5	6	1	9.8	13.5	24	10	350
SD12	12	13.3	1	19	25.9	15	1	150
SD15	15	16.7	1	24	30	12	1	100
SD18	18	20	1	29	40	9	1	90
SD24	24	26.7	1	43	48	8	1	90
SD36	36	40	1	60	75	5	1	75

**Pulse Waveform**



**PEAK PULSE POWER VS PULSE TIME**

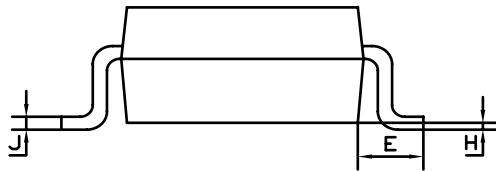
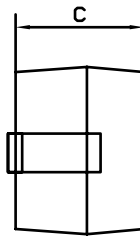
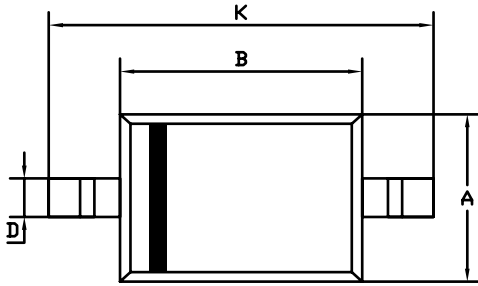




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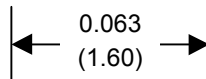
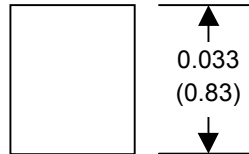
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### SOD-323 PACKAGE OUTLINE & DIMENSIONS



SOD-323		
Dim	Min	Max
A	1.275	1.325
B	1.675	1.725
C	0.9 Typical	
D	0.25	0.35
E	0.27	0.37
H	0.02	0.1
J	0.1 Typical	
K	26	27
All Dimensions in mm		

### SUGGESTED SOLDER PAD LAYOUT



inches(mm)