

## APPLICATIONS

- ✧ Cellular Handsets & Accessories.
- ✧ Cordless Phones.
- ✧ Personal Digital Assistants (PDA's).
- ✧ Portable Instrumentation.
- ✧ Notebooks & Handhelds.
- ✧ Digital Cameras.
- ✧ MP3 Players.

## IEC COMPATIBILITY

- ✧ IEC61000-4-2 (ESD)  $\pm 15\text{kV}$  (air),  $\pm 8\text{kV}$  (contact).
- ✧ IEC61000-4-4 (EFT) 40A (5/50ns).

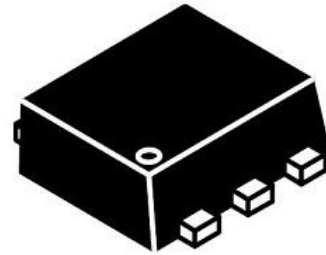
## FEATURES

- ✧ 100 Watts Peak Pulse Power per Line ( $t_p=8/20\mu\text{s}$ ).
- ✧ Protects up to four / five I/O lines.
- ✧ Ultra-small SC-89 package (1.6 x 1.6 x 0.55mm)  
requires less than 2.9mm<sup>2</sup> of PCB area.
- ✧ Working voltages : 5V.
- ✧ Low leakage current.

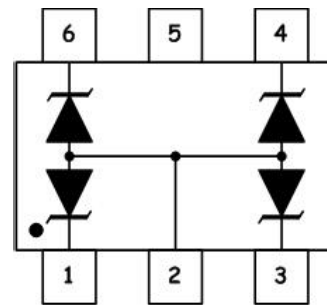
## MECHANICAL CHARACTERISTICS

- ✧ SOT-563 Package.
- ✧ Molding Compound Flammability Rating : UL 94V-O.
- ✧ Weight 3 Milligrams (Approximate).
- ✧ Quantity Per Reel : 3,000pcs.
- ✧ Reel Size : 7 inch.
- ✧ Lead Finish : Lead Fre

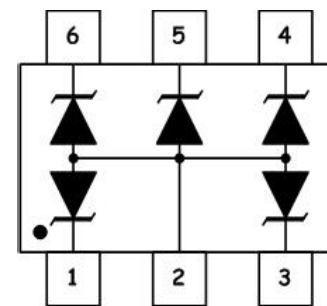
### SOT-563



### PIN CONFIGURATION



**SDA0504T6**

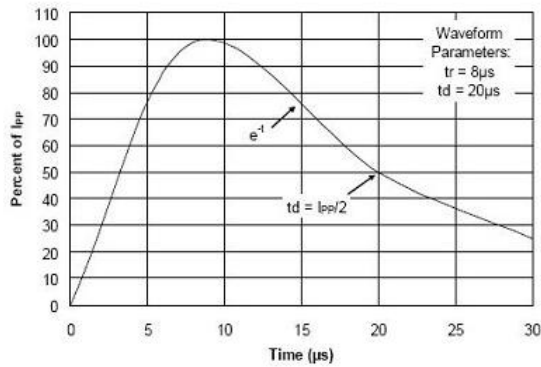
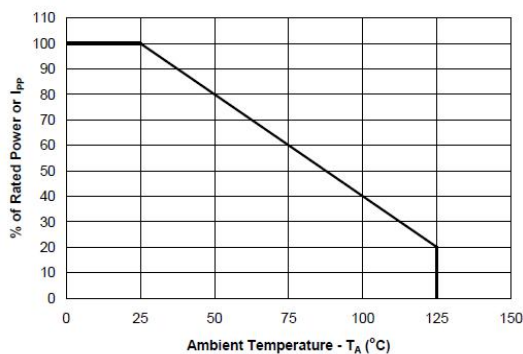
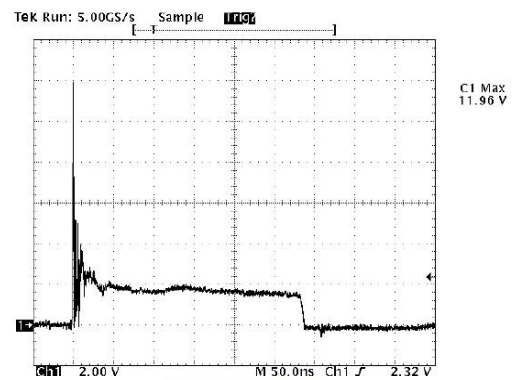
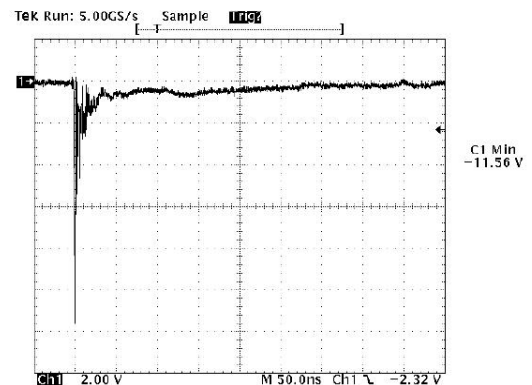


**SDA0505T6**

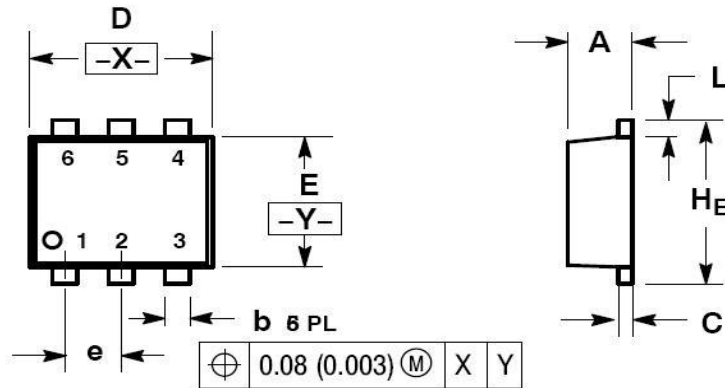
**DEVICE CHARACTERISTICS**

MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20μs waveform)	P <sub>PP</sub>	100	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	DEVICE MARKING	V <sub>RWM</sub> (V) (max.)	V <sub>B</sub> (V) (min.)	I <sub>T</sub> (mA)	V <sub>C</sub> @1A (max.)	V <sub>C</sub> (max.) (@A)		I <sub>R</sub> (μA) (max.)	C <sub>T</sub> (pF) (typ.)
SDA0504T6	U4	5	6	1	9.8	12	5	1	30
SDA0505T6	U5	5	6	1	9.8	12	5	1	30

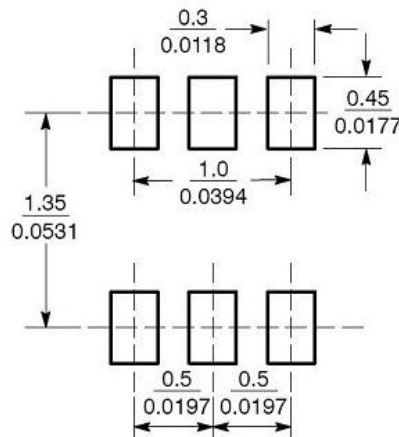
**Pulse Waveform**

**Power Derating Curve**

**ESD Clamping  
(8kV Contact per IEC 61000-4-2)**

**ESD Clamping  
(-8kV Contact per IEC 61000-4-2)**


**SOT-563 PACKAGE OUTLINE & DIMENSIONS**



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.50	0.55	0.60	0.020	0.021	0.023
b	0.17	0.22	0.27	0.007	0.009	0.011
C	0.08	0.12	0.18	0.003	0.005	0.007
D	1.50	1.60	1.70	0.059	0.062	0.066
E	1.10	1.20	1.30	0.043	0.047	0.051
e	0.5 BSC			0.02 BSC		
L	0.10	0.20	0.30	0.004	0.008	0.012
H <sub>E</sub>	1.50	1.60	1.70	0.059	0.062	0.066

**\* SOLDERING FOOTPRINT**



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