

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).

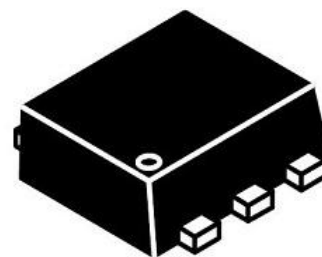
FEATURES

- ✧ 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 ($1.6 \times 1.6 \times 0.55\text{mm}$) requires less than 2.9mm^2 of PCB area.
- ✧ Working voltages : 5V.
- ✧ Low leakage current.

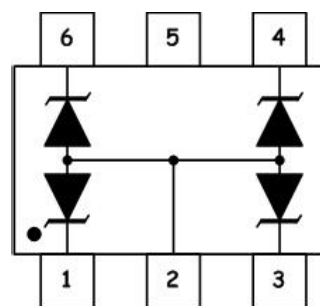
MECHANICAL CHARACTERISTICS

- ✧ 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 Free.

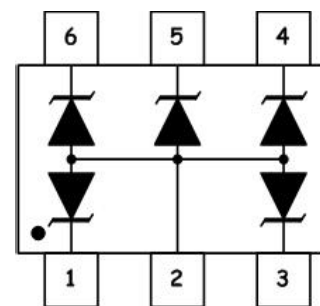
SOT-563



PIN CONFIGURATION



YSDA0504T6



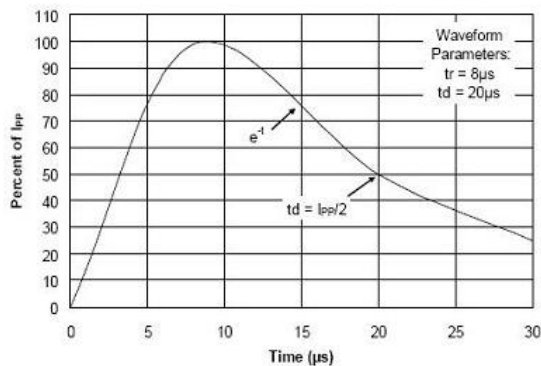
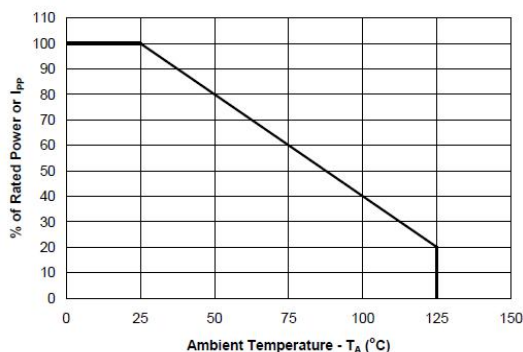
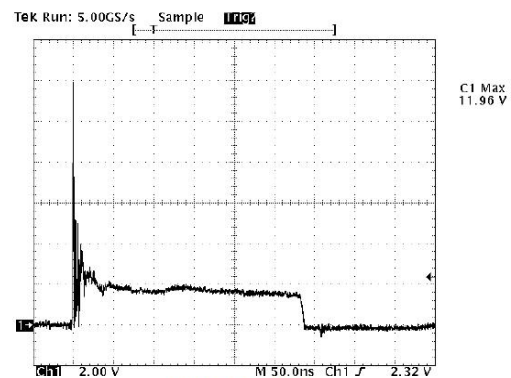
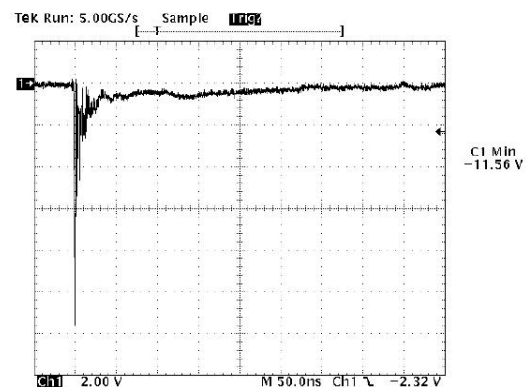
YSDA0505T6

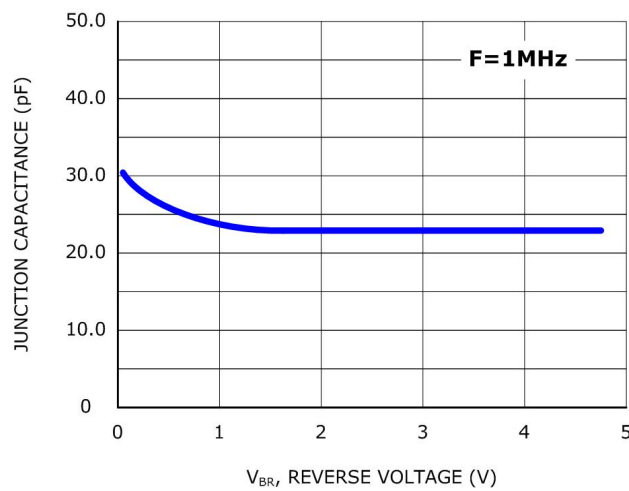
DEVICE CHARACTERISTICS
MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)

PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20μs waveform)	P _{PP}	100	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

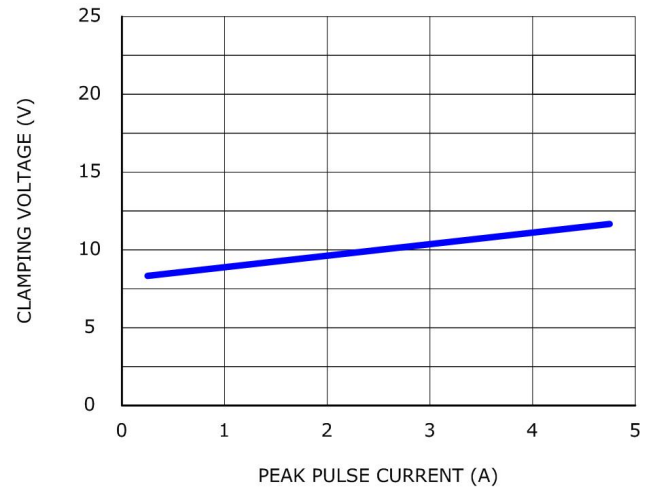
ELECTRICAL CHARACTERISTICS PER LINE (@ 25°C Unless Otherwise Specified)

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) (typ.)
YSDA0504T6	U4	5	6	1	9.8	12	5	1	30
YSDA0505T6	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)**


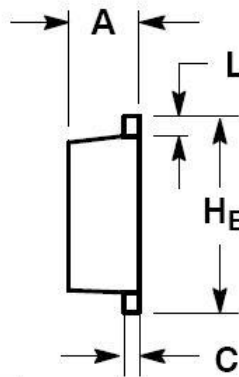
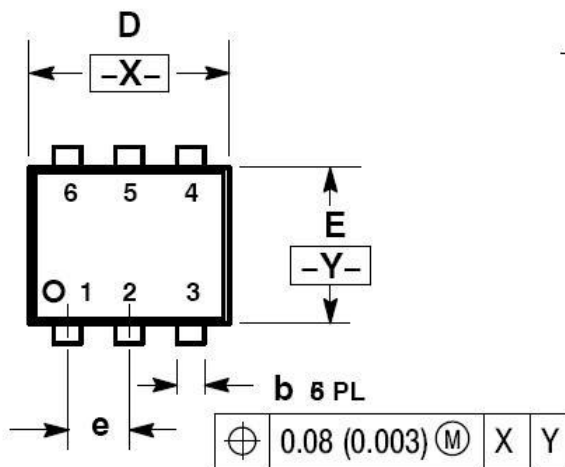


Normalized Capacitance vs. Reverse Voltage



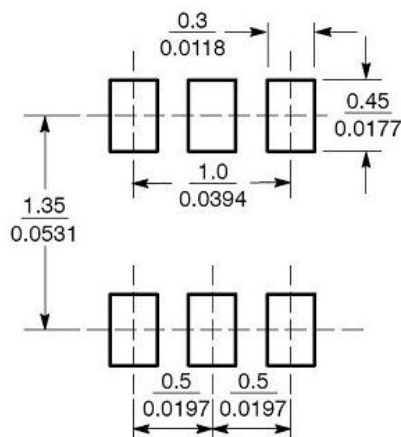
Clamping Voltage vs. Peak Pulse Current

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 _E	1.50	1.60	1.70	0.059	0.062	0.066

*** SOLDERING FOOTPRINT**



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