

APPLICATIONS

- ✧ High-Speed data lines.
- ✧ Cellular handsets AND accessories.
- ✧ Universal Serial Bus (USB) port protection.
- ✧ Portable instrumentation.
- ✧ LAN / WAN equipment.
- ✧ Peripherals.

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) 12A (8/20 μs).

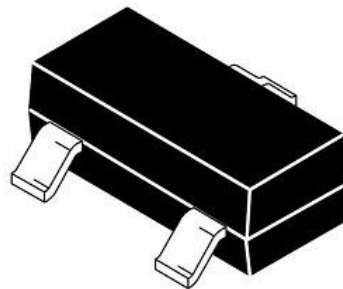
FEATURES

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

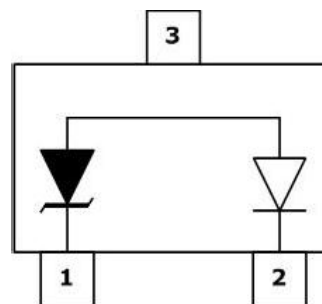
MECHANICAL CHARACTERISTICS

- ✧ JEDEC SOT-23 Package.
- ✧ Molding Compound Flammability Rating : UL 94V-O.
- ✧ Weight 8 Milligrams (Approximate).
- ✧ Quantity Per Reel : 3,000pcs.
- ✧ Reel Size : 7 inch.
- ✧ Lead Finish : Lead Free.

SOT-23



PIN CONFIGURATION

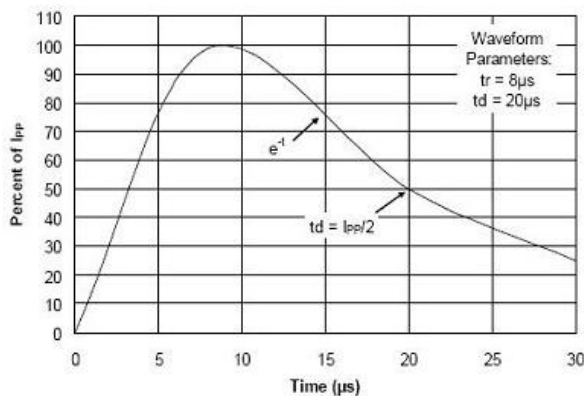
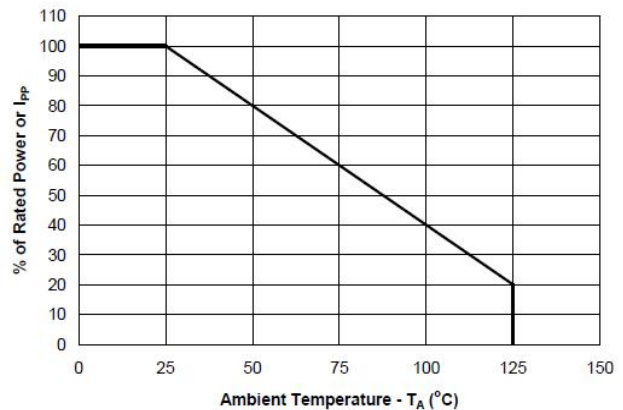


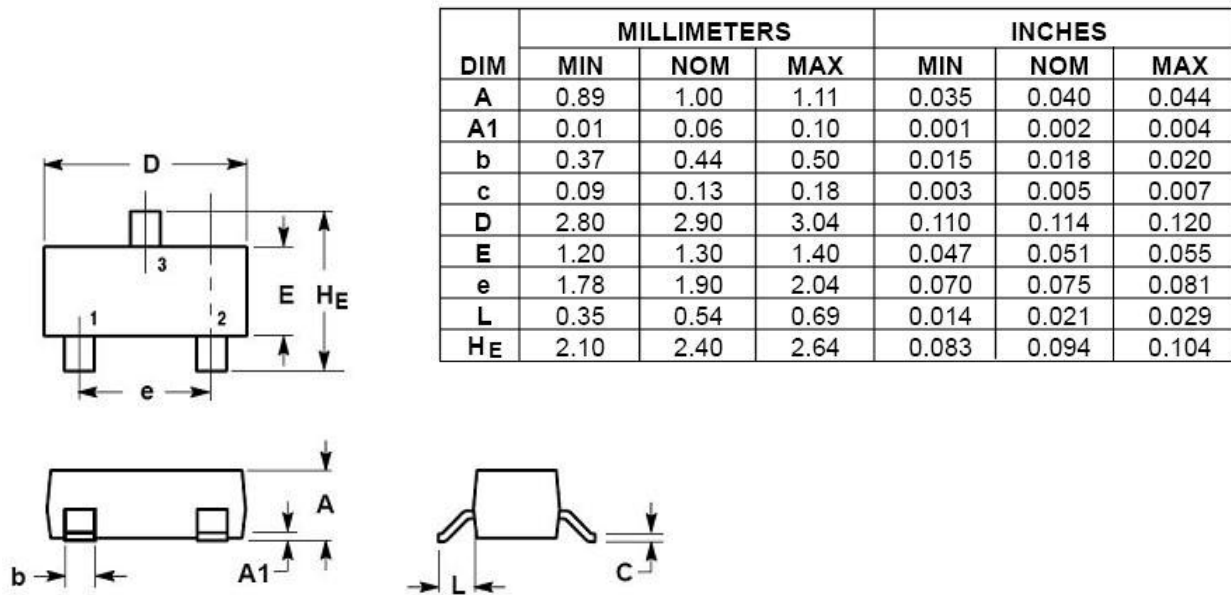
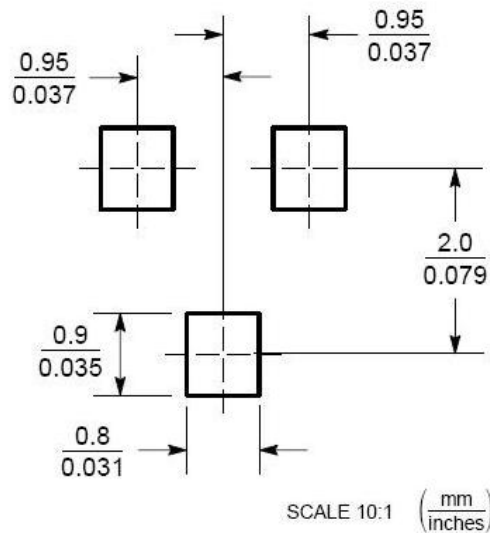
DEVICE CHARACTERISTICS
MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)

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) (typ.)
LC33DT3	TL3	3.3	4.0	1	7.0	9.0	5	40	5
LC05DT3	TL5	5.0	6.0	1	9.8	11.0	5	5	5
LC08DT3	TL8	8.0	8.5	1	13.4	15.0	5	5	5
LC12DT3	TLA	12.0	13.3	1	19.0	23.0	5	1	5
LC15DT3	TLB	15.0	16.7	1	24.0	28.0	5	1	5
LC24DT3	TLD	24.0	26.7	1	43.0	46.0	5	1	5
LC36DT3	TLH	36.0	40.0	1	51.0	68.0	5	1	5

Pulse Waveform

Power Derating Curve


SOT-23 PACKAGE OUTLINE & DIMENSIONS

*** SOLDERING FOOTPRINT**

 Website: <http://www.jksemi.com>

For additional information, please contact your local Sales Representative.

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