

APPLICATIONS

- ✧ USB Power & Data Line Protection.
- ✧ Ethernet 10BaseT.
- ✧ I2C Bus Protection.
- ✧ Video Line Protection.
- ✧ T1/E1 secondary IC Side Protection.
- ✧ Microcontroller Input Protection.
- ✧ ISDN S/T Interface.
- ✧ WAN/LAN Equipment.

IEC COMPATIBILITY

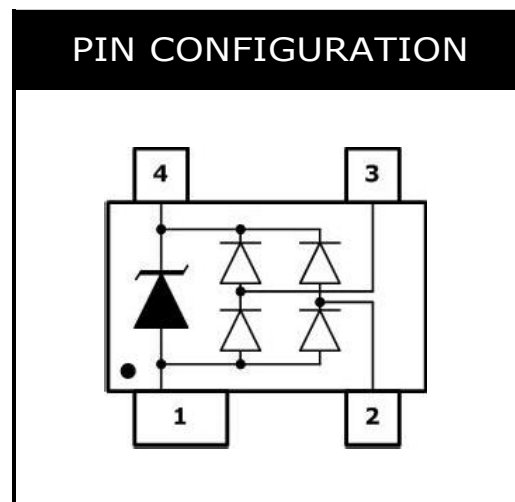
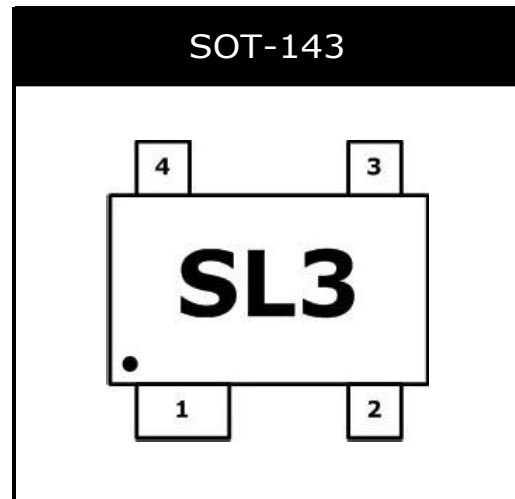
- ✧ IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact).
- ✧ IEC61000-4-4 (EFT) 40A (5/50ns).
- ✧ IEC61000-4-5 (Lightning) 12A (8/20 μs).

FEATURES

- ✧ 500 Watts Peak Pulse Power per Line ($t_p=8/20\mu\text{s}$).
- ✧ Protects two I/O lines.
- ✧ Low clamping voltage.
- ✧ Working voltages : 5V.
- ✧ Low leakage current.

MECHANICAL CHARACTERISTICS

- ✧ JEDEC SOT-143 Package.
- ✧ Molding Compound Flammability Rating : UL 94V-O.
- ✧ Weight 10 Milligrams (Approximate).
- ✧ Quantity Per Reel : 3,000pcs.
- ✧ Reel Size : 7 inch.
- ✧ Lead Finish : Lead Free.

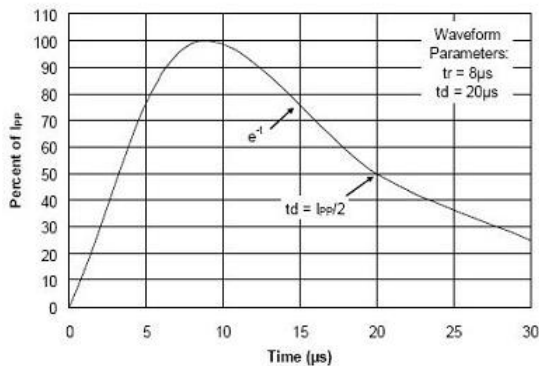
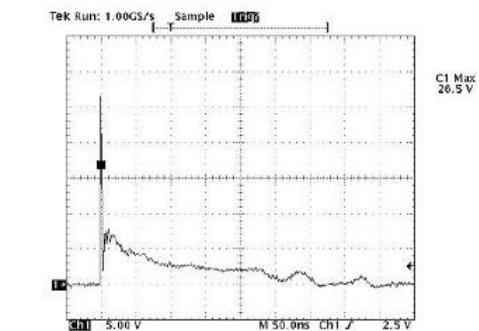


DEVICE CHARACTERISTICS
MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)

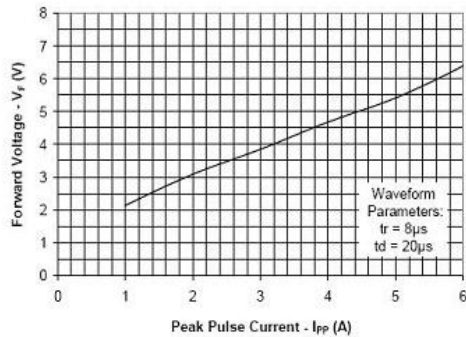
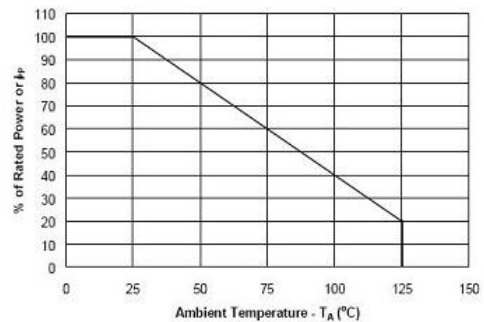
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20μs waveform)	P _{PP}	500	Watts
Lead Soldering Temperature	T _L	260 (10 sec.)	°C
Operating Temperature Range	T _J	-55 ~ 150	°C
Storage Temperature Range	T _{STG}	-55 ~ 150	°C

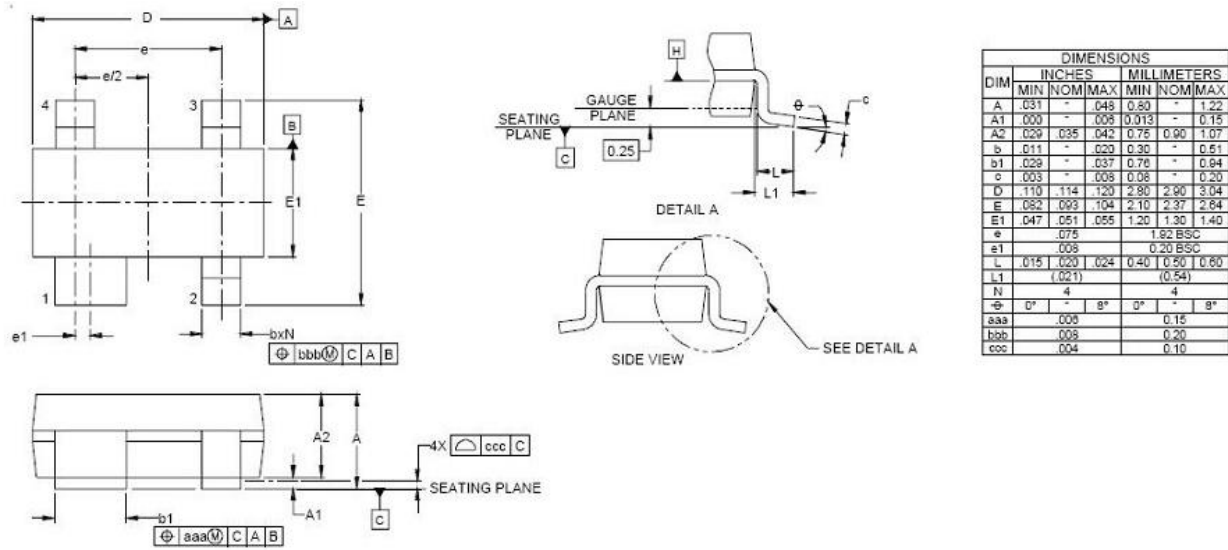
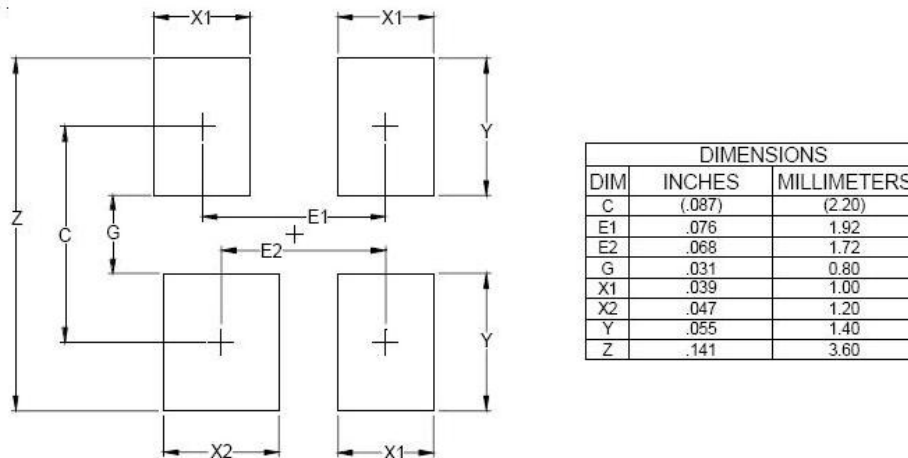
ELECTRICAL CHARACTERISTICS PER LINE (@ 25°C Unless Otherwise Specified)

PART NUMBER	DEVICE MARKING	V _{RWM} (V) (max.)	V _B (V) (min.)	I _T (mA)	V _C @1A (max.)	V _C (max.) (@A)		I _R (μA) (max.)	C _T (pF) (max.)
SR05	SL3	5	6	1	9.8	12	10	5	3

Pulse Waveform

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


Note: Data is taken with a 10x attenuator


Power Derating Curve


SOT-143 PACKAGE OUTLINE & DIMENSIONS

*** SOLDERING FOOTPRINT**


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

For additional information, please contact your local Sales Representative.

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