

ESD Protection Diode**FEATURES**

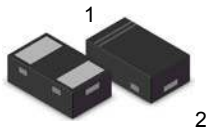
- Small Body Outline Dimensions:
1.00 mm x 0.60 mm
- Low Body Height: 0.5 mm
- Low Leakage
- Response Time is Typically < 1 ns
- ESD Rating of Class 3 (> 16 kV)
per Human Body Model

MECHANICAL DATA

- Case : Molded, plastic SOD-882
- Polarity : Shown follows
- Epoxy : UL94-V0 rated flame
retardant

SOD-882 PACKAGE

Marking : Q4

**APPLICATIONS**

- Cellular phones audio
- MP3 players
- Digital cameras
- Portable applications
- mobile telephone

IEC COMPATIBILITY

- IEC 61000-4-2 (ESD) $\pm 15\text{kV}$ (air),
 $\pm 8\text{kV}$ (contact)

SCHEMATIC & PIN CONFIGURATION**DESCRIPTION**

The SEDS8LL5.0CT5 is designed to protect voltage sensitive components from ESD. Excellent clamping capability, low leakage, and fast response time ,make these parts ideal for ESD protection on designs where board space is at a premium. Because of its small size, it is suited for use in cellular phones, MP3 players, digital cameras and many other portable applications where board space is at a premium.

ESD Protection Diode
MAXIMUM RATINGS

Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD) Air discharge		±15	kV
Contact discharge		±8	kV
ESD Voltage Per Human Body Model		16	kV
Total Power Dissipation on FR-5 Board (Note 1) @ T _A =25°C	PD	200	mW
Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to 150	°C
Lead Solder Temperature – Maximum (10 Second Duration)	TL	260	°C

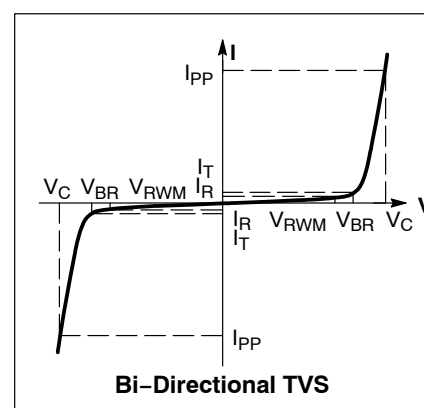
Stresses exceeding Maximum Ratings may damage the device. Maximum Rating are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

1. FR-5 = 1.0*0.75*0.62 in.

ELECTRICAL CHARACTERISTICS

(T_A = 25°C unless otherwise noted)

Symbol	Parameter
I _{PP}	Maximum Reverse Peak Pulse Current
V _C	Clamping Voltage @ I _{PP}
V _{RWM}	Working Peak Reverse Voltage
I _R	Maximum Reverse Leakage Current @ V _{RWM}
V _{BR}	Breakdown Voltage @ I _T
I _T	Test Current
P _{pk}	Peak Power Dissipation
C	Capacitance @ V _R = 0 and f = 1.0 MHz



ESD Protection Diode
ELECTRICAL CHARACTERISTICS

Device	V_{RWM} (V)	I_R (μ A) @ V_{RWM}	V_{BR} (V) @ I_T (Note 2)	I_T	V_C (V) @ $I_{PP} = 1$ A (Note 3)	V_C (V) @ MAX I_{PP} (Note 3)	I_{PP} (A) (Note 3)	P_{PK} (W) (Note 3)	C (pF)	
	Max	Max	Min	mA	Max	Max	Max	Max	Typ	Max
SESD8LL5.0CT5	5	0.5	6	1.0	12	20	4	80	0.25	0.3

Other voltage available upon request.

- V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C
- Surge current waveform per Figure 1.

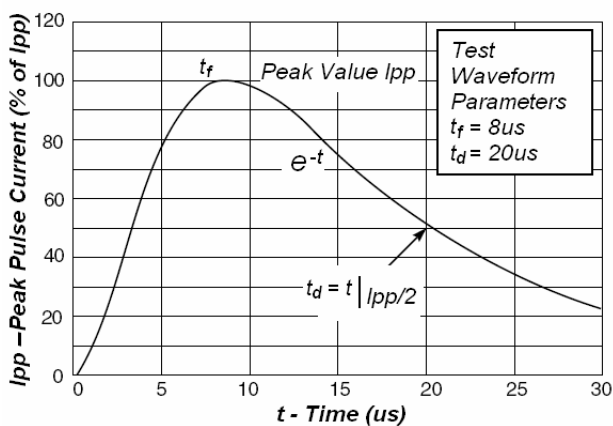


Fig1. Pulse Waveform

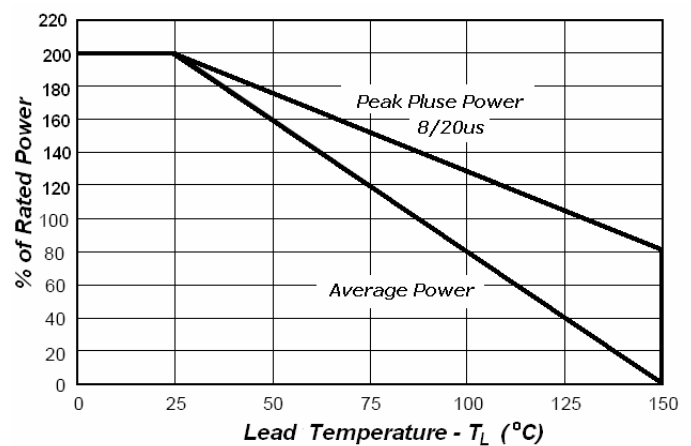
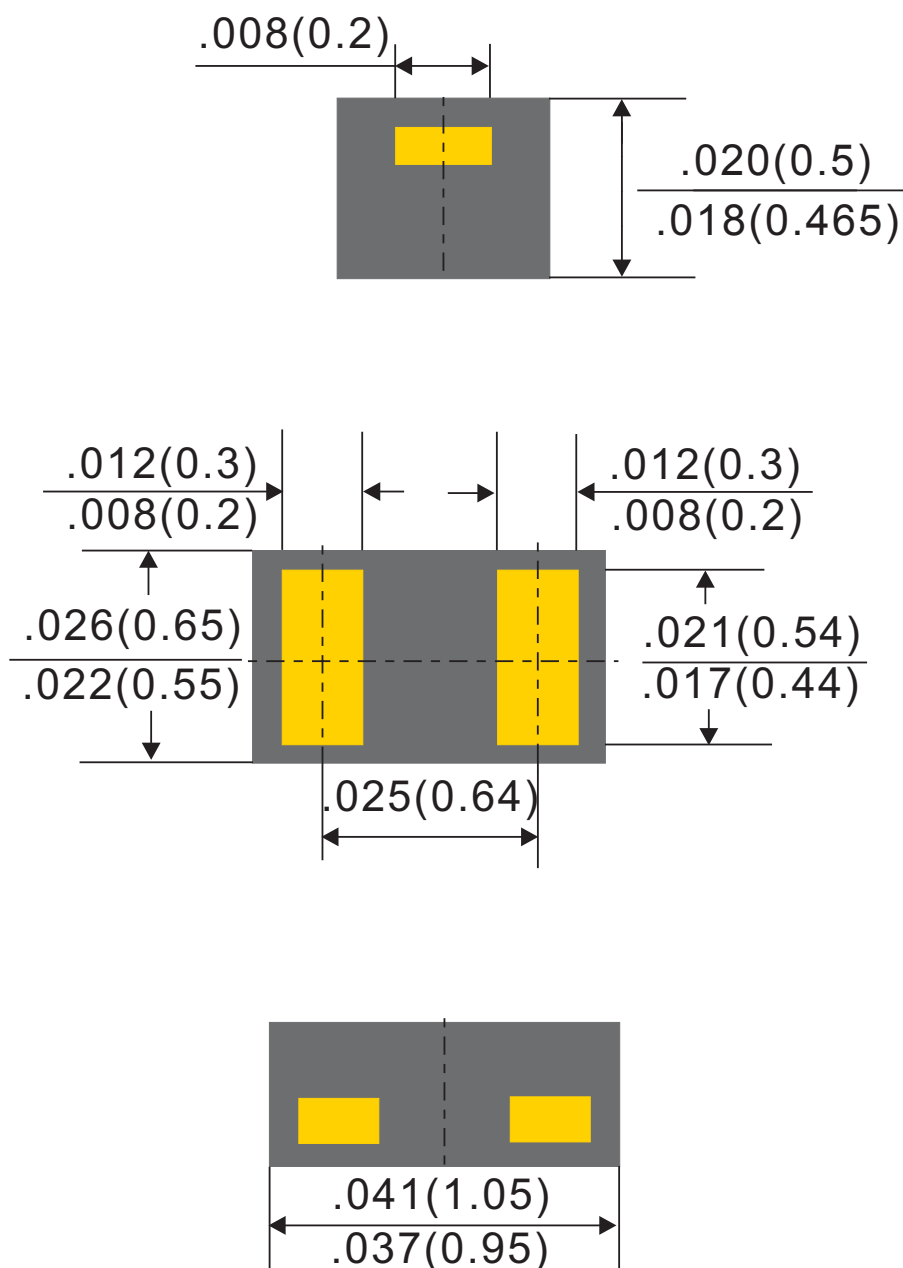


Fig2. Power Derating Curve

Outline Drawing

SOD-882



Dimensions in inches and (millimeters)

Rev.B

Ordering Information:

Device PN	Packing
SESD8LL5.0CT5 -T ⁽¹⁾ H ⁽²⁾ -WS ⁽³⁾	Tape&Reel: 10 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) Halogen free product for packing code suffix "H"

(3) WS : Willas brand abbreviation, Label Type does not display

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