

DESCRIPTION

The ESD5Z5CL is designed to protect voltage sensitive components from ESD and transient voltage events. 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.

APPLICATIONS

- ✧ Cellular phones.
- ✧ Portable devices.
- ✧ Digital cameras.
- ✧ Power supplies.

FEATURES

- ✧ Small Body Outline Dimensions.
- ✧ Low Body Height.
- ✧ Peak Power up to 200 Watts @ 8 x20 μ s Pulse.
- ✧ Low Leakage current.
- ✧ Response Time is Typically < 1 ns.

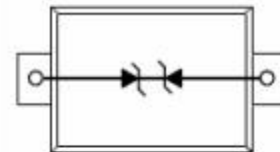
COMPLIES WITH THE FOLLOWING STANDARDS

- ✧ IEC61000-4-2.
- ✧ Level 4 15 kV (air discharge)
8 kV(contact discharge) .
- ✧ MIL STD 883E - Method 3015-7 Class 3
25 kV HBM (Human Body Model) .

SOD-523



PIN CONFIGURATION



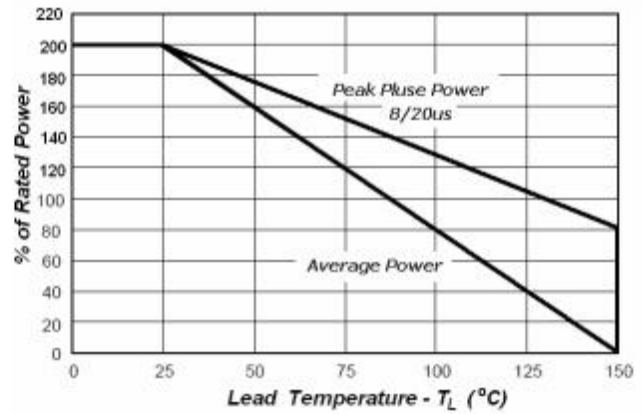
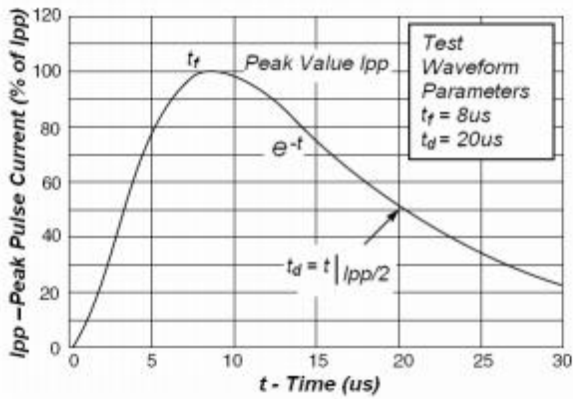
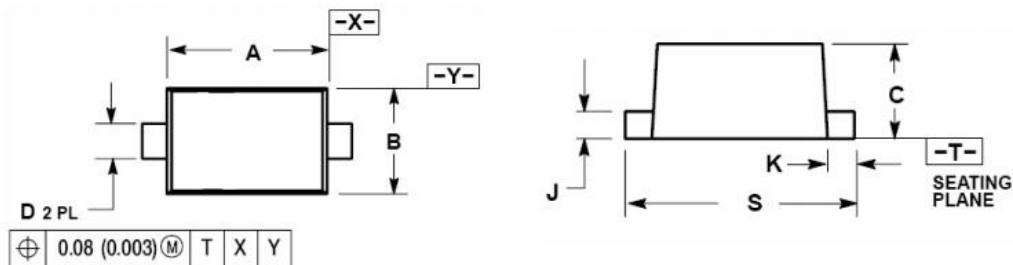
DEVICE CHARACTERISTICS

Absolute Ratings (T _a =25°C)			
Symbol	Parameter	Value	Units
P _{pp}	Peak Pulse Power (t _p = 8/20ps)	200	W
T _L	Maximum lead temperature for soldering during 10s	260	°C
T _{stg}	Storage Temperature Range	-55 to +155	°C
T ^o _p	Operating Temperature Range	-40 to+125	°C
T _j	Maximum junction temperature	150	°C
	IEC61000-4-2 (ESD) air discharge contact discharge	±15 ±8	kV
	IEC61000-4-4 (EFT)	40	A
	ESD Voltage Per Human Body Model <div style="text-align: right;">Per Machine Model</div>	16 400	kV V

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.VF = 0.9V at IF = 10mA									
Part Numbers	V _{BR}			I _T	V _{RWM}	I _R	V _F	I _F	C
	Min.	Typ.	Max.				Max.		Typ. 0v bias
	V	V	V	mA	V	μA	V	mA	pF
ESD5Z5CL	5.8	6.7	7.8	1	5.0	1	1.25	200	3

*Surge current waveform per Figure 1.

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

TYPICAL CHARACTERISTICS

SOD-523 MECHANICAL DATA


Dim	Millimeters			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	1.10	1.20	1.30	0.043	0.047	0.051
B	0.70	0.80	0.90	0.028	0.032	0.035
C	0.50	0.60	0.70	0.020	0.024	0.028
D	0.25	0.30	0.35	0.010	0.012	0.014
J	0.07	0.14	0.20	0.0028	0.0055	0.0079
K	0.15	0.20	0.25	0.006	0.008	0.010
S	1.50	1.60	1.70	0.059	0.063	0.067

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

For additional information, please contact your local Sales Representative.

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