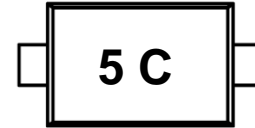


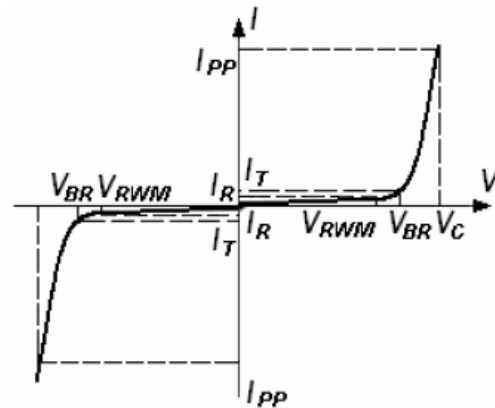
## Feature

- 200W peak pulse power per line ( $t_p = 8/20\mu s$ )
- SOD-523 package
- Replacement for MLV(0603)
- Bidirectional configurations
- Response Time is Typically  $< 1$  ns
- ESD protection  $> 16$  kV
- Low clamping voltage
- RoHS compliant
- Transient protection for data lines to IEC 61000-4-2(ESD)  $\pm 15$ KV(air),  $\pm 8$ KV(contact); IEC 61000-4-4 (EFT) 40A (5/50ns)



## Applications

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



## Electrical characteristics per line@25°C (unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse stand-off voltage	$V_{RWM}$				5	V
Reverse Breakdown voltage	$V_{BR}$	$I_t = 1mA$	5.6	6.7	7.8	V
Reverse Leakage Current	$I_R$	$V_{RWM} = 5V$ $T=25^\circ C$			1.0	$\mu A$
Junction Capacitance	$C_j$	$V_R=0V$ $f = 1MHz$		32		pF

## Absolute maximum rating @25°C

Rating	Symbol	Value	Units
Unidirectional Peak Pulse Power ( $t_p=8/20\mu s$ )	$P_{pp}$	200	W
Operating Temperature	$T_J$	-55 to +150	$^\circ C$
Storage Temperature	$T_{STG}$	-55 to +150	$^\circ C$

Typical Characteristics

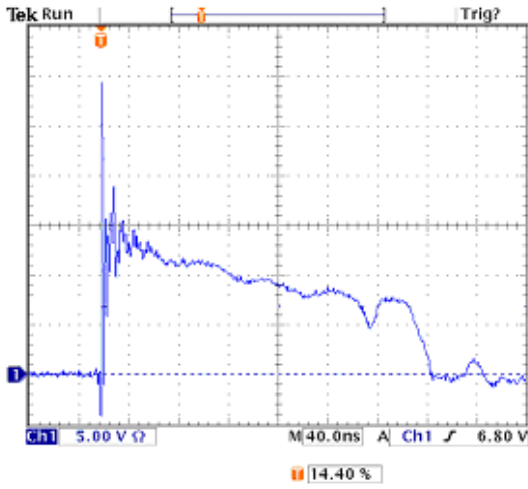


Figure 3. Positive 8 kV Contact per IEC 6100-4-2

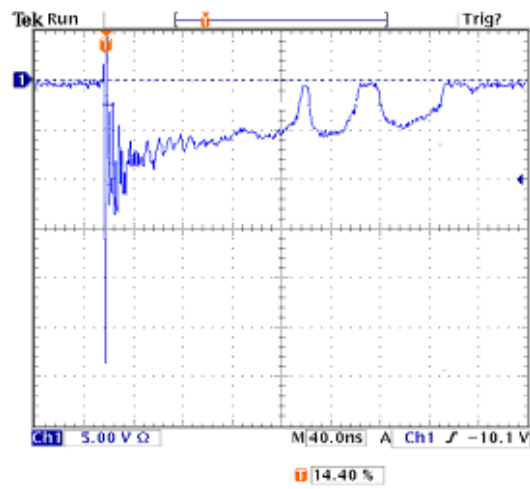
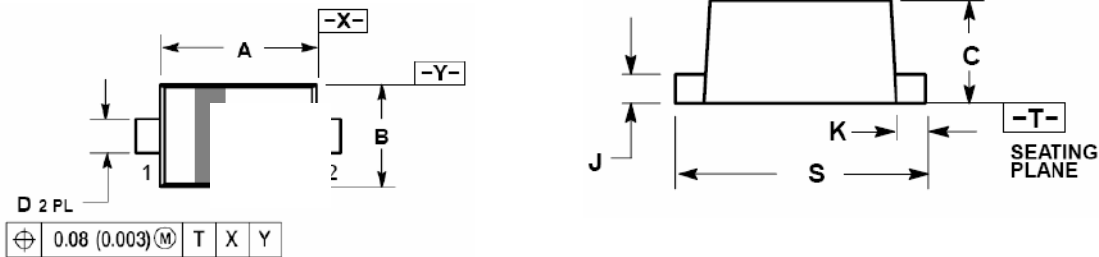


Figure 4. Negative 8 kV Contact per IEC 6100-4-2

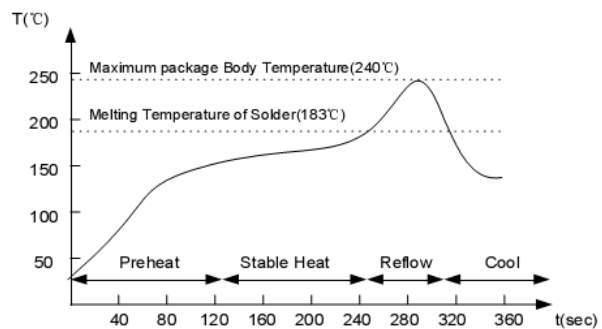
**Product dimension and pad size**


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

**Reflow Soldering and Rework Recommendations**

Recommended reflow methods, Recommended reflow methods: IR, Vapor phase oven, hot air oven.

- Devices can be cleaned using standard industry methods and solvents.
- If a device is removed from the board, it should be discarded and replaced with a new device.
- Leaded devices are not designed to be compatible with wave soldering manufacturing operations.
- Lead free reflow curve.



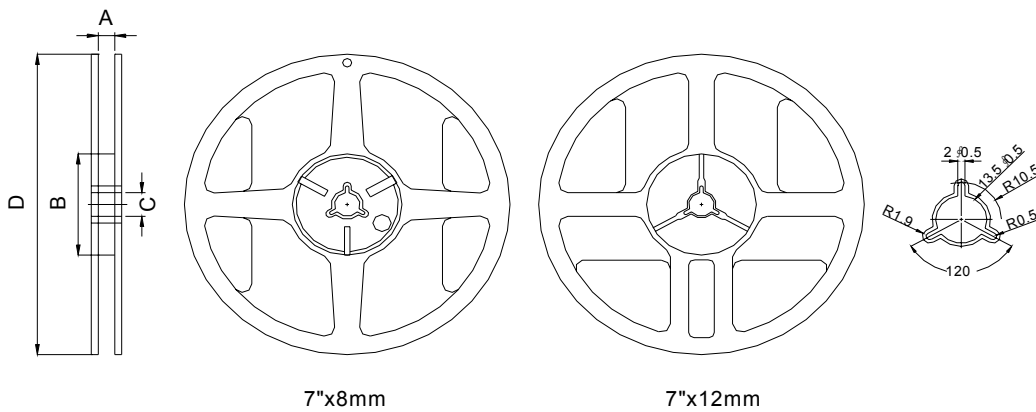
**NOTE** If reflow temperatures exceed recommended profile, devices may not meet the performance requirements, If the reflow curve can not meet your product, please contact SEMITEL.

**How To Order**

Device	Package	Carrier	Marking Code	Standard Quantity
SES5VD523-2B	SOD	Tape	5C	3000pcs

## Package Information

Type	A (mm)	B (mm)	C (mm)	D(mm)
7"x8mm	9.0±0.5	60±2	13.5±0.5	178±2



**Note:** The way of adding the products to the tape is : at intervals of one .

## Revision History

Revision	Date	Changes
1.0	2008-7-3	-