APPROVAL DRAWING

Surge Components product name
SES5VD323-2B TR (RoHS compliant)

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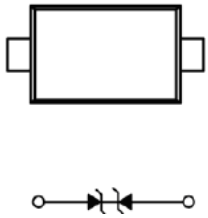
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Surge Components, Inc.

Customer Acknowledgement	Manufacturer Surge Components, Inc. 2009-05-06

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1. FEATURE



- 500 Watts peak pulse power per line (tp=8/20us)
- SOD-323 package
- Replacement for MLV (0805)
- Unidirectional configurations
- Protects one power or I/O port
- ESD protection > 35 kV
- Low clamping voltage
- RoHS compliant
- Transient protection for data lines to IEC 61000-4-2(ESD) ± 15KV (air),
- ± 8KV(contact); IEC 6100-4-4(EFT) 40A (5/50ns)

2. APPLICATION

- **Laptop computers**
- **Cellular phones**
- **Digital cameras**
- **PDAs**

3. ELECTRICAL CHARACTERISTICS PER LINE@25℃(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	6.0			V
Reverse Leakage Current	I_R	V_{RWM}=5V T=25℃			1	μA
Clamping Voltage	V_C	I_{PP} =1A t_p=8/20μs			9.8	V
Clamping Voltage	V_C	I_{PP} =42A t_p=8/20μs			13.5	V
Junction Capacitance	C_j	V_R =0V, f =1MHZ			35	pF

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4. ABSOLUTE MAXIMUM RATING @25℃

Rating	Symbol	Value	Units
Unidirectional Peak Pulse Power(t_p=8/20μs)	P_{PP}	500	W
Operating Temperature	T_j	-55 to +150	℃
Storage Temperature	T_{STG}	-55 to +150	℃

5.TYPICAL CHARACTERISTICS

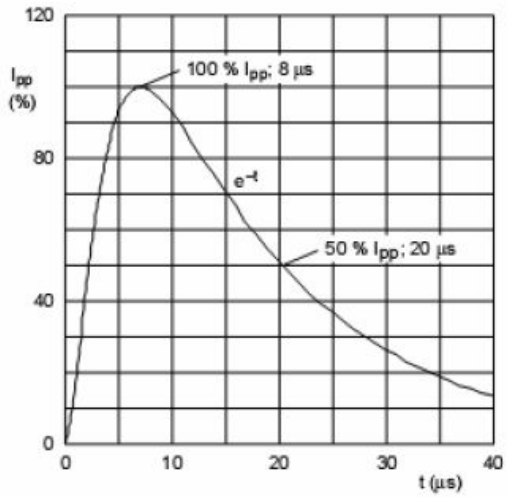


Figure 1. 8/20us pulse waveform

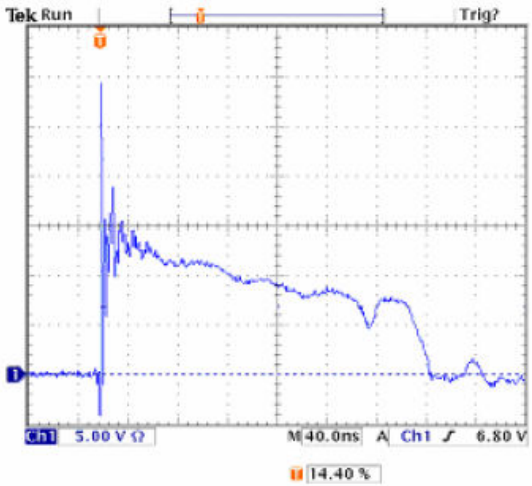


Figure 2 . Positive 8 kV Contact per IEC 6100-4-2

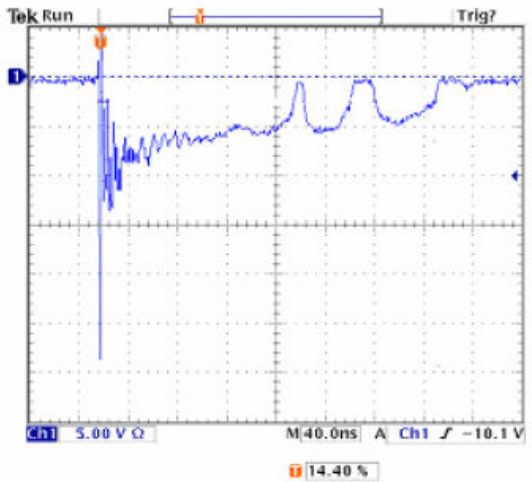


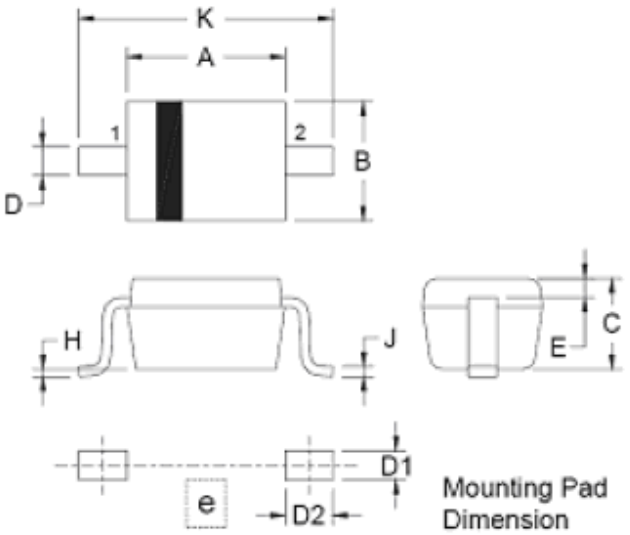
Figure 3. Negative 8 kV Contact per IEC 6100-4-2

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6.PRODUCT DIMENSION

DIM	Min.	Max
A	1.60	1.80
B	1.15	1.45
C	0.80	1.00
D	0.25	0.40
D1	-	*0.4
D2	-	*0.5
E	0.15	-
e	-	*2.20
H	0.00	0.10
J	0.089	0.18
K	2.30	2.70

Tipical Unit: mm

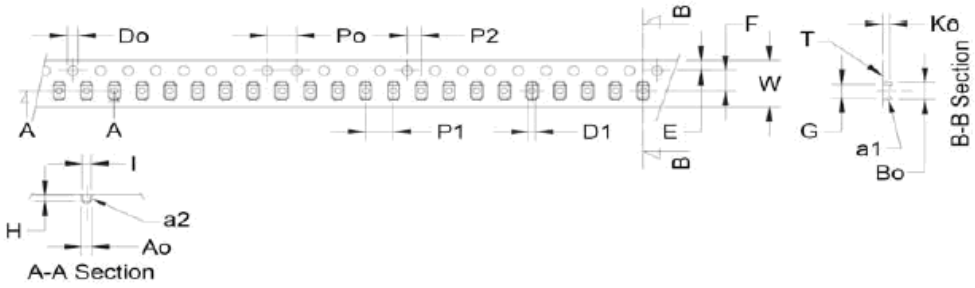


2-Lead SOD-323 Plastic
Surface Mounted Package

7.Packing inforamtion

DIM	Min.	Max
Ao	1.42	1.62
Bo	2.80	3.00
Ko	1.25	1.45
Po	3.90	4.10
P1	3.90	4.10
P2	1.95	2.05
T	0.24	0.27
E	1.65	1.85
F	3.45	3.55
Do	1.40	1.60
D1	0.75	1.25
W	7.90	8.30
G	-	*2.08
H	-	*1.07
I	-	*0.84
a1	-	5”
a2	-	8”

Tipical Unit: mm



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