

APPROVAL DRAWING

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

CONTENTS

1. FEATURE
2. APPLICATION
3. ELECTRICAL CHARACTERISTICS
4. ABSOLUTE MAXIMUM RATING
5. TYPICAL CHARACTERISTICS
6. PRODUCT DIMENSION AND PAD SIZE
7. PACKING INFORMATION

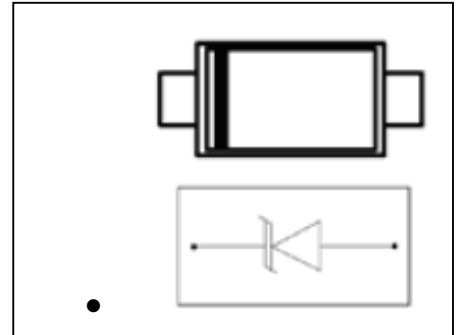
Customer Acknowledgement

Surge Components, Inc.

Manufacturer Surge Components, Inc.
2009-05-06

1.. FEATURE

- 500 Watts peak pulse power per line ($t_p=8/20\mu s$)
- SOD-323 package
- Replacement for MLV (0805)
- Unidirectional configurations
- Protects one power or I/O port
- ESD protection > 40 kV
- Low clamping voltage
- RoHS compliant
- Transient protection for data lines to IEC 61000-4-2(ESD) $\pm 15kV$ (air),
 $\pm 8kV$ (contact); IEC 6100-4-4(EFT) 40A (5/50ns)
 IEC 6100-4-5 (surge): 24A, 8/20us-Level 2 (line-ground) & Level 3 (line-line)



2. APPLICATION

- Laptop computers
- Cellular phones
- Digital cameras
- PDAs

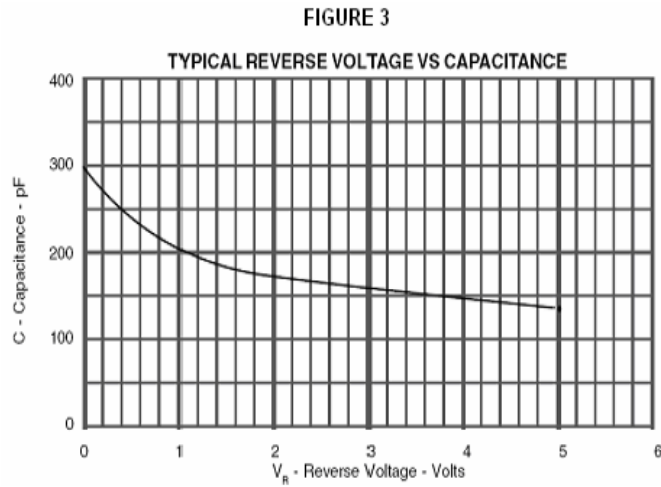
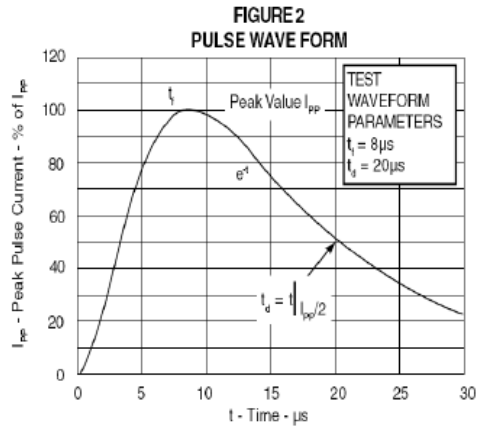
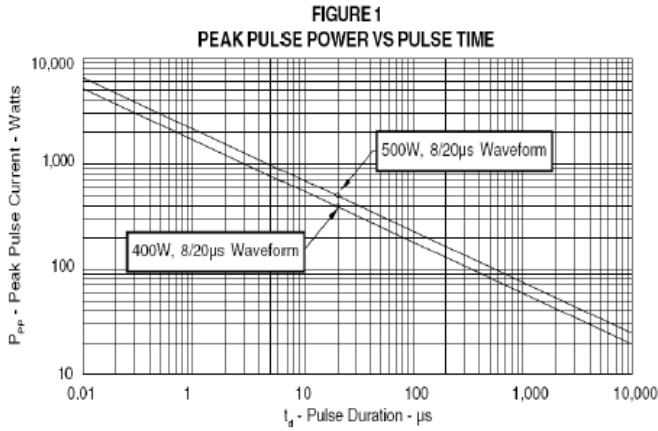
3. ELECTRICAL CHARACTERISTICS PER LINE@25°C (UNLESS OTHERWISE SPECIFIED)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse stand-off voltage	V_{RWM}				5	V
Reverse Breakdown voltage	V_{BR}	$I_t = 1mA$	6.0			V
Reverse Leakage Current	I_R	$V_{RWM} = 5V$			1	μA
Clamping Voltage	V_C	$I_{PP} = 1A$ $t_p = 8/20\mu s$			9.8	V
Clamping Voltage	V_C	$I_{PP} = 42A$ $t_p = 8/20\mu s$			14.5	V
Junction Capacitance	C_j	$V_R = 0V$, $f = 1MHz$		300		pF

4. ABSOLUTE MAXIMUM RATING @25°C

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

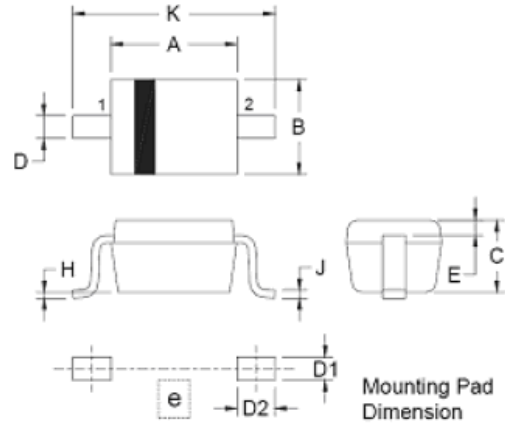
5. TYPICAL CHARACTERISTICS



6. PRODUCT DIMENSION AND PAD SIZE.

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

Typical 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"

Typical Unit: mm

