

APPLICATIONS

- ✧ USB I/O Line Protection.
- ✧ Monitors and Flat Panel Displays.
- ✧ Video Graphics Cards.
- ✧ Digit Video Interface (DVI).
- ✧ SIM Ports.
- ✧ High Definition Multi-Media Interface (HDMI).
- ✧ Set Top Box.
- ✧ Projection TV.

IEC COMPATIBILITY

- ✧ IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact).
- ✧ IEC61000-4-4 (EFT) 40A (5/50ns).

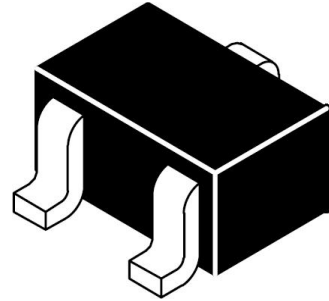
FEATURES

- ✧ 100 Watts Peak Pulse Power per Line ($t_p=8/20\mu\text{s}$).
- ✧ Protects Two high speed I/O lines.
- ✧ Working voltages : 5V.
- ✧ Low clamping voltage.
- ✧ RoHS Compliant.

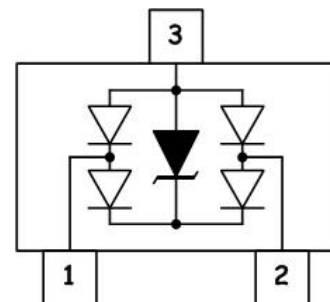
MECHANICAL CHARACTERISTICS

- ✧ SOT-523 Package.
- ✧ Molding Compound Flammability Rating : UL 94V-O.
- ✧ Weight 3.0 Milligrams (Approximate).
- ✧ Quantity Per Reel : 3,000pcs.
- ✧ Reel Size : 7 inch.
- ✧ Lead Finish : Lead Free.

SOT-523



PIN CONFIGURATION

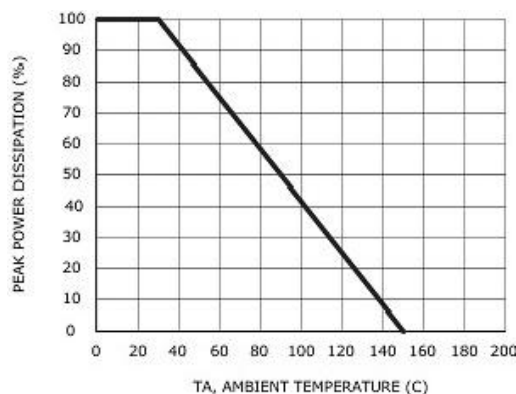
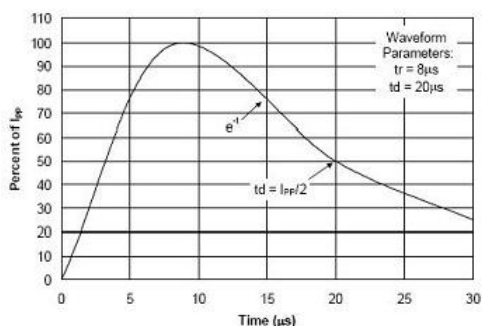
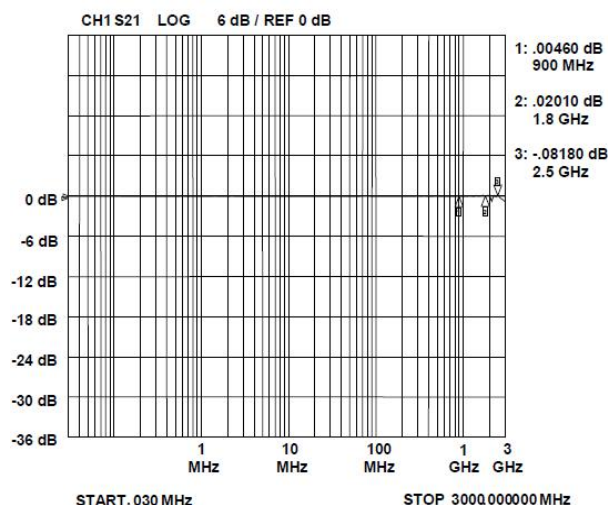
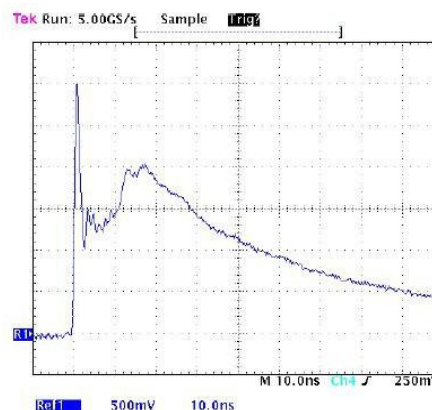


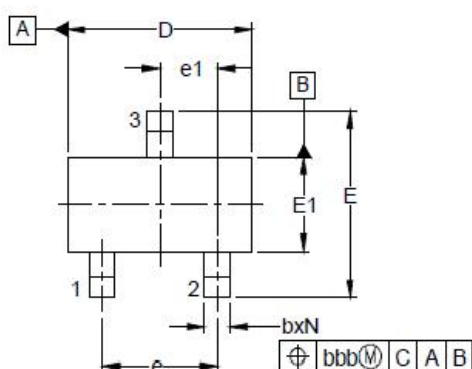
DEVICE CHARACTERISTICS
MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)

PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20μs waveform)	P _{PP}	100	Watts
Lead Soldering Temperature	T _L	260 (10 sec.)	°C
Operating Temperature Range	T _J	-55 ~ 150	°C
Storage Temperature Range	T _{STG}	-55 ~ 150	°C

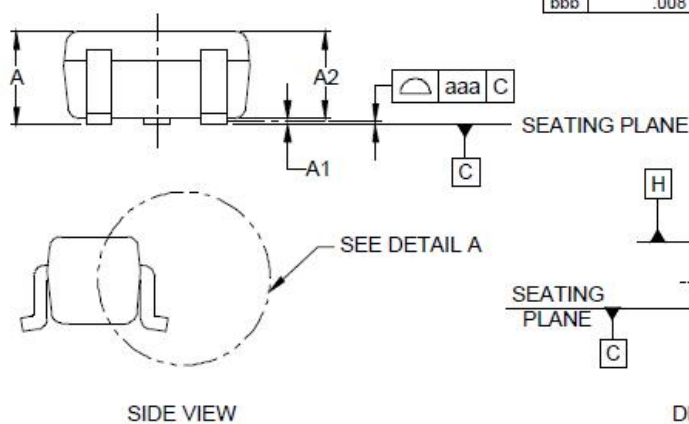
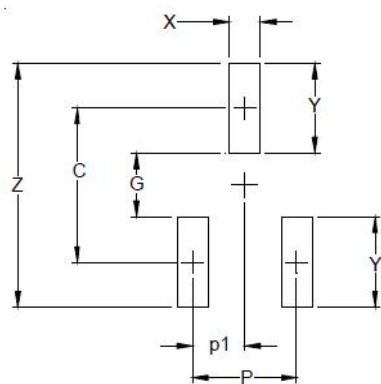
ELECTRICAL CHARACTERISTICS PER LINE (@ 25°C Unless Otherwise Specified)

PART NUMBER	DEVICE MARKING	V _{RWM} (V) (max.)	V _B (V) (min.)	I _T (mA)	V _C @1A (max.)	V _C (max.) (@A)		I _R (μA) (max.)	C _T (pF) (typ.)
ULC0502T3	P5	5	6.0	1	9.8	25	2	1	1.2

Pulse Waveform

Insertion Loss S21 (Pin 1 or Pin 2 to Pin 3)

ESD Pulse Waveform (Per IEC 61000-4-2)


SOT-523 PACKAGE OUTLINE & DIMENSIONS


DIM	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	.023	-	.035	0.60	-	0.90
A1	.000	-	.004	0.00	-	0.10
A2	.023	.030	.031	0.60	0.75	0.80
b	.005	-	.012	0.15	-	0.30
c	.003	-	.008	0.10	-	0.20
D	.059	.063	.067	1.50	1.60	1.70
E	.057	.063	.069	1.45	1.60	1.75
E1	.029	.031	.033	0.75	0.80	0.85
e	.039 BSC			1.00 BSC		
e1	.020 BSC			0.50 BSC		
L	(.009)			(0.22)		
N	3			3		
θ	0°	-	8°	0°	-	8°
aaa	.004			0.10		
bbb	.008			0.20		


*** SOLDERING FOOTPRINT**


DIM	DIMENSIONS	
	INCHES	MILLIMETERS
C	(.055)	(1.40)
P	.039	1.00
p1	.020	0.50
G	.024	0.60
X	.016	0.40
Y	.031	0.80
Z	.087	2.20

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

For additional information, please contact your local Sales Representative.

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