

**MSATS14S40L**  
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**40 Volts**  
**250 Amps**  
**14.5KW**

**TRANSIENT VOLTAGE**  
**SUPPRESSOR**

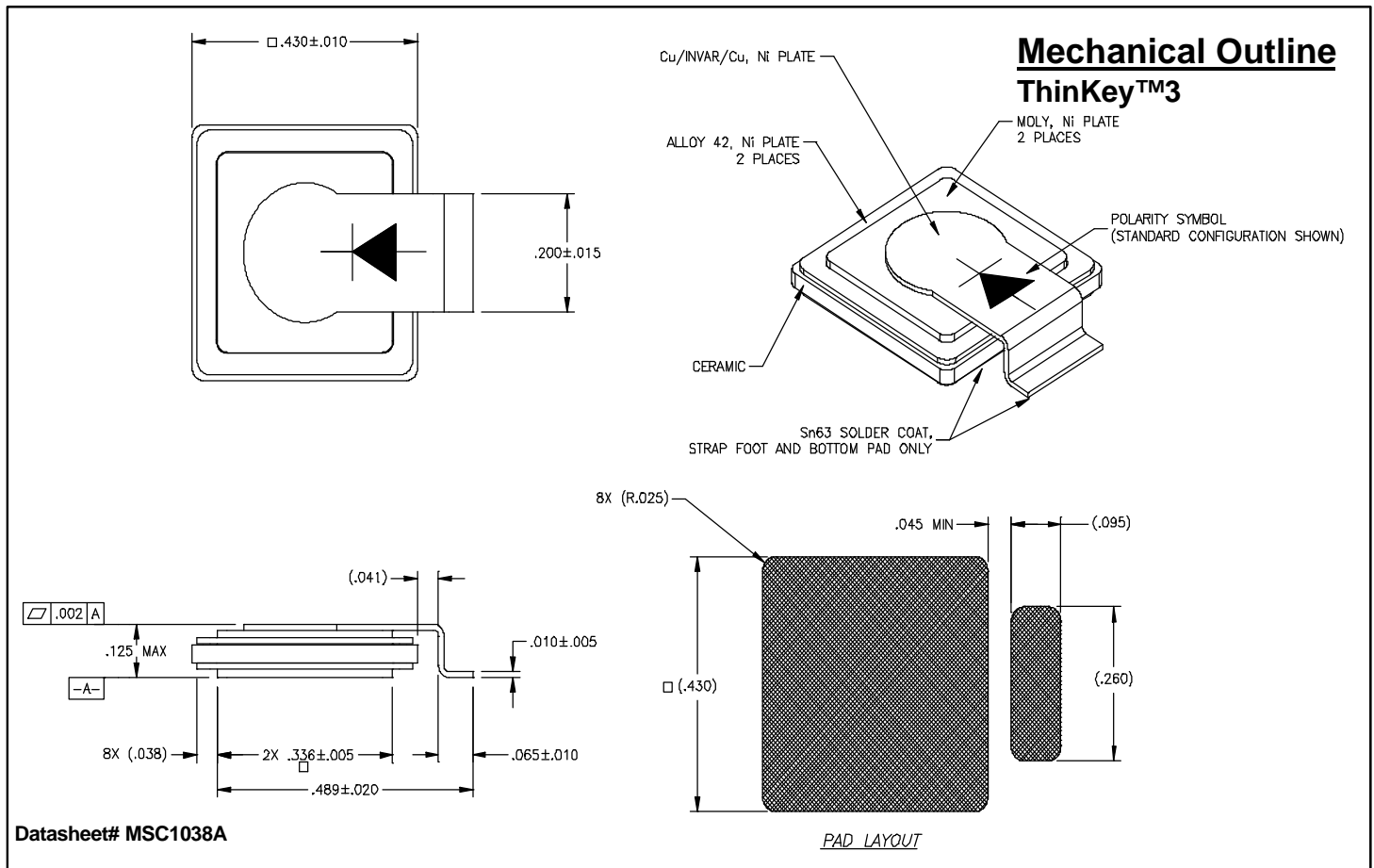
*PRELIMINARY*

**Features**

- Very High Surge Rating - 14,500 Watts peak power
- Hermetically sealed, low profile ceramic surface mount power package
- Low package inductance
- Very low thermal resistance
- Available as standard polarity (strap is anode: MSATS14S40L) and reverse polarity (strap is cathode: MSATS14S40LR)

**Maximum Ratings @ 25°C (unless otherwise specified)**

DESCRIPTION	SYMBOL	MAX.	UNIT
Peak Pulse Power (1ms)	P <sub>pp</sub>	14500	Watts
t <sub>clamping</sub> :0 volts to VBR min (theoretical)		< 1	picosecond
Forward Surge Rating, 1/120 sec @25°C	I <sub>FSM</sub>	TBD	Amps
Junction Temperature Range	T <sub>j</sub>	-65 to +175	°C
Storage Temperature Range	T <sub>stg</sub>	-65 to +175	°C
Thermal Resistance, Junction to Case:	θ <sub>JC</sub>	0.2	°C/W



# MSATS14S40L

# MSATS14S40LR

## Electrical Parameters @25°C

DESCRIPTION	SYMBOL	CONDITIONS	MIN	TYP.	MAX	UNIT
Breakdown Voltage	$V_{BR}$	$I_{BR} = 1mA$ 25°C	40	43	n/a	V
Rated Standoff Voltage	$V_R$		36			V
Reverse Leakage	$I_R$	$V_R = 36V$		0.3	5	$\mu A$
Peak Pulse Current	$I_{PP}$	$t_r=10\mu s$ , $t_p=1ms$ (see fig.1)			250	A
Clamping Voltage	$V_{C1}$	$I_{PP} = 250A$ $t_r=10\mu s$ , $t_p=1ms$		55	58	
Clamping Voltage	$V_{C2}$	$I_{PP} = 200A$ $t_r=6\mu s$ , $t_p=70\mu s$		48	51	
Temp. Coef. of $V_{BR}$					TBD	%/C

Fig.1 Pulse Waveform

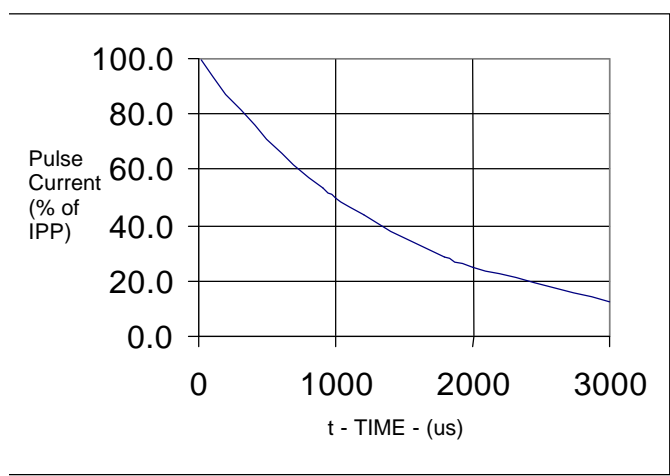


Fig.2 Derating Curve

