

MSATS14S40L
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40 Volts
250 Amps
14.5KW

TRANSIENT VOLTAGE
SUPPRESSOR

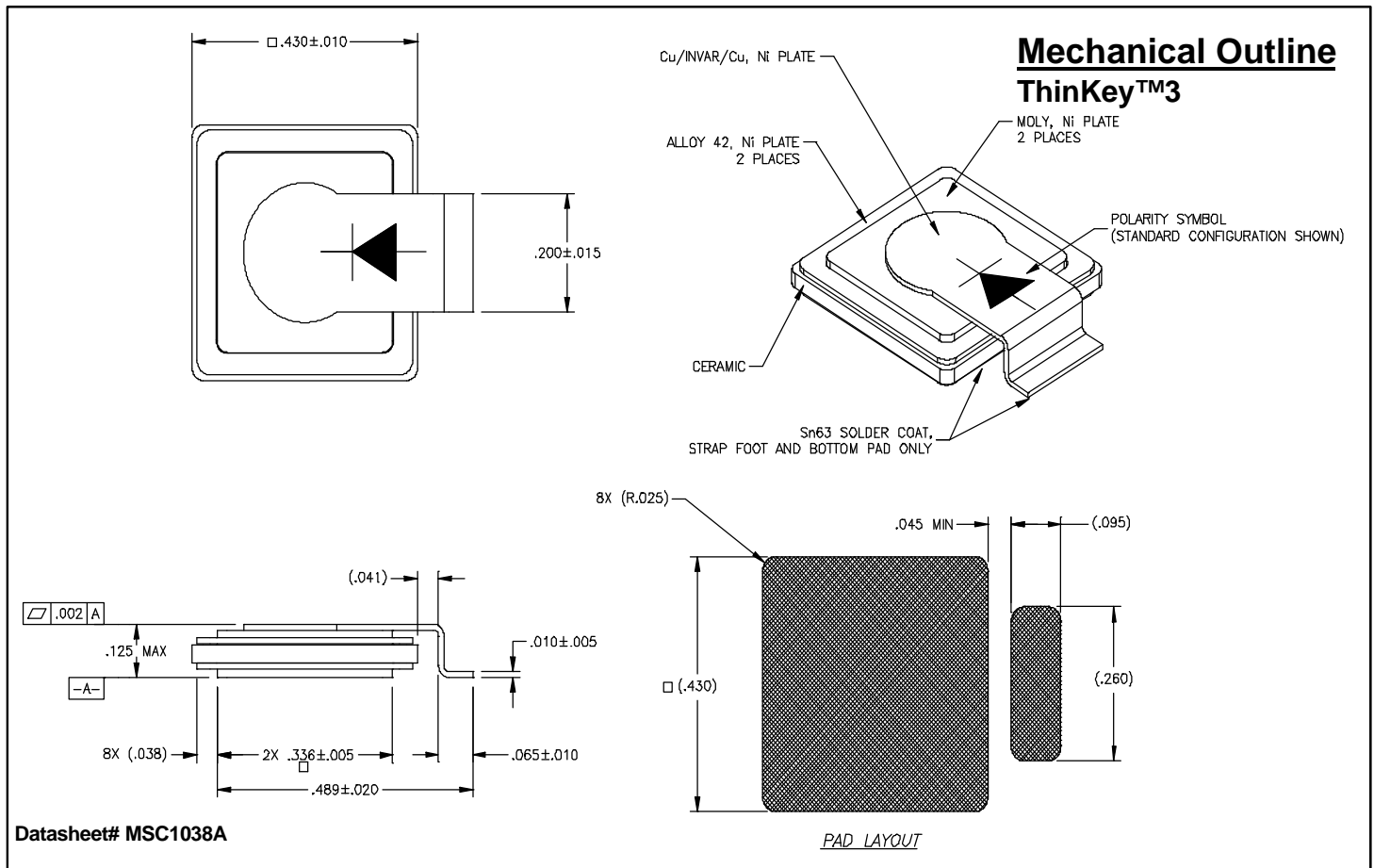
PRELIMINARY

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 _{pp}	14500	Watts
t _{clamping} :0 volts to VBR min (theoretical)		< 1	picosecond
Forward Surge Rating, 1/120 sec @25°C	I _{FSM}	TBD	Amps
Junction Temperature Range	T _j	-65 to +175	°C
Storage Temperature Range	T _{stg}	-65 to +175	°C
Thermal Resistance, Junction to Case:	θ _{JC}	0.2	°C/W



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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	μA
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

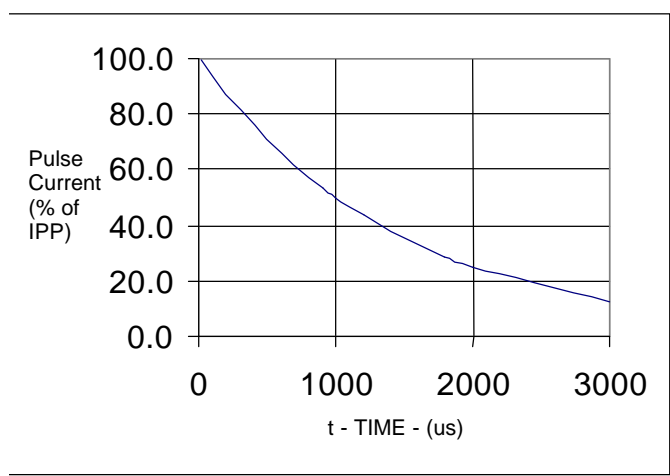


Fig.2 Derating Curve

