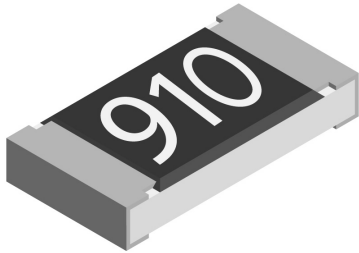


## Thin Film, Rectangular, Fusible, Resistor Chips



### FEATURES

- Metal film on high quality ceramic
- Special protective top coat
- Flame retardant
- Sn solder contacts on Ni barrier layer
- Fusible resistor for constant voltage
- Automatic placement compatibility

### STANDARD ELECTRICAL SPECIFICATIONS

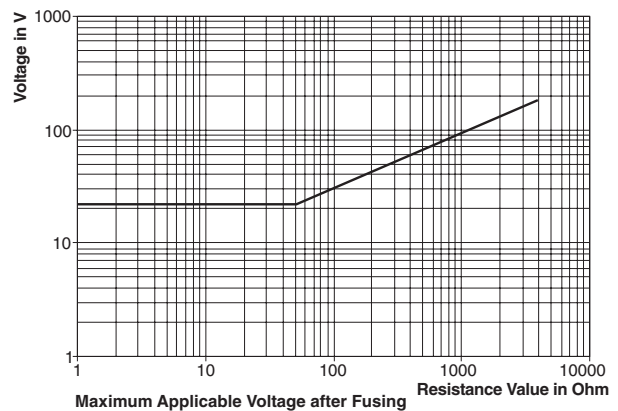
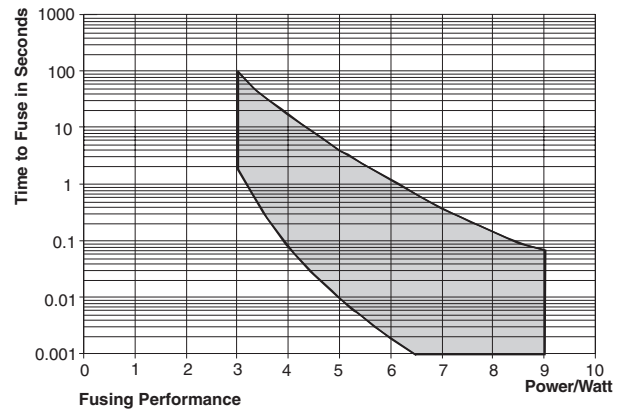
MODEL	SIZE		POWER RATING W <sub>70°C</sub>	LIMITING ELEMENT VOLTAGE V <sub>≡</sub> MAX	TEMPERATURE COEFFICIENT ppm/K	TOLERANCE %	RESISTANCE RANGE Ω	E-SERIES
	INCH	METRIC						
M25SI	1206	3216	0.25	$\sqrt{P \times R}$	100	5	1R – 3K9	24

- Power rating depends on the max. temperature at the solder point, the component placement density and the substrate material.
- Marking: 3 digits.
- Ask about extended value ranges.
- TC 50ppm/°C, Tolerance 1% on special request.
- Top coat: beige, transparent.

### TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	M25SI
Rated Dissipation at 70°C	W	0.25
Insulation Voltage (1 min)	V <sub>dc/ac peak</sub>	> 300
Thermal Resistance <sup>1)</sup>	K/W	≤ 220 <sup>1)</sup>
Insulation Resistance	Ω	> 10 <sup>9</sup>
Category Temperature Range	°C	- 55 / + 125
Failure Rate	h <sup>-1</sup>	1 • 10 <sup>-9</sup>
Weight / 1000pcs	g	10

<sup>1)</sup> Measuring conditions in acc. with CECC 40401

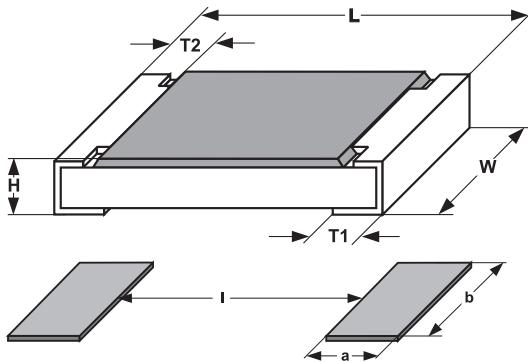


### PULSE TEST DATA

Pulse Power (Square Pulse)	0.9W	0.3W
Pulse Duration t <sub>i</sub>	100μs	100ms
Pulse Pause t <sub>p</sub>	100ms	1s
Number of pulses	10 <sup>5</sup>	10 <sup>5</sup>
Drift after pulse test	< 0.1%	< 0.1%

### ORDERING INFORMATION

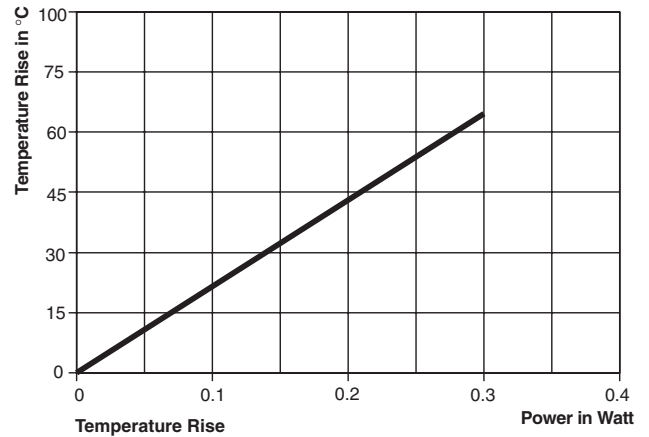
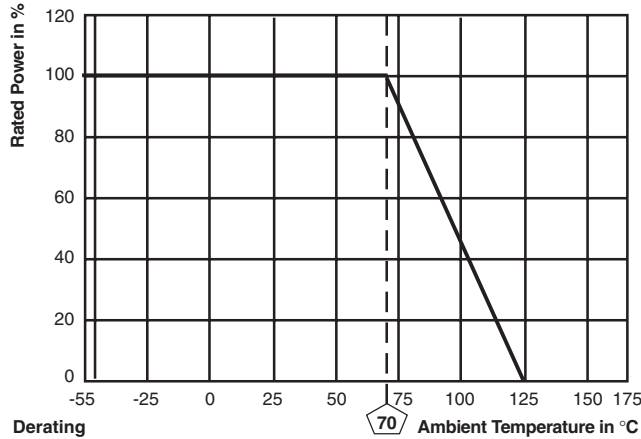
M25SI	100	91R	5%	P5
MODEL	TC ppm/K	RESISTANCE VALUE Ω	TOLERANCE ± %	PACKAGING P5-Papertape 5000 pcs

**DIMENSIONS**


SIZE		DIMENSIONS [in millimeters]				
INCH	METRIC	L	W	H	T1	T2
1206	3216	$3.2^{+0.10}_{-0.20}$	$1.6 \pm 0.15$	$0.55 \pm 0.05$	$0.45 \pm 0.2$	$0.4 \pm 0.2$

SIZE		SOLDER PAD DIMENSIONS in millimeters*					
INCH	METRIC	a	b	l	a	b	l
1206	3216	0.9	1.7	2.0	1.1	1.7	2.3

\*Pads: recommendations only



PERFORMANCE		
TEST	CONDITIONS OF TEST	REQUIREMENTS <sup>1)</sup>
Endurance Test at 70°C IEC 60115-1 4.25.1	1000 hours at 70°C 1.5 hours "ON", 0.5 hours "OFF"	$\leq \pm 1\%$
Endurance at UCT IEC 60115-1 4.25.3	1000 hours at 125 °C without load	$\leq \pm 1\%$
Thermal Shock IEC 60115-1 4.19, IEC 60068-2-14	Rapid change between upper and lower category temperature	$\leq \pm 0.2\%$
Damp Heat Steady State IEC 60115-1 4.24, IEC 60068-2-3	56 days at 40°C and 93% relative humidity	$\leq \pm 0.5\%$
Resistance to Soldering Heat IEC 60115-1 4.18, IEC 60068-2-20	10 seconds at 260°C solder bath temperature	$\leq \pm 0.2\%$

<sup>1)</sup>Limits for change of resistance at test

APPLICABLE SPECIFICATIONS
<ul style="list-style-type: none"> <li>• CECC40000 / 40400</li> <li>• EN140400 / IEC 60115 – 1</li> </ul>



## Disclaimer

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