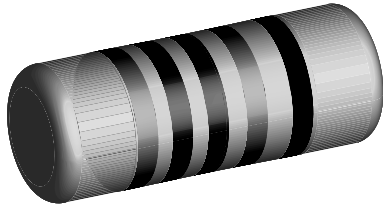


## Metal Film, Cylindrical Resistors



### FEATURES

- Stable metal film on high quality ceramic
- Very low TC and tight tolerances
- Excellent stability at different environmental conditions
- Force fitted steel caps, tin plated on nickel barrier

### STANDARD ELECTRICAL SPECIFICATIONS

MODEL	POWER RATING $P_{70^{\circ}\text{C}}^{1)}$ W	LIMITING ELEMENT VOLTAGE MAX <sup>2)</sup> $V_{\cong}$	TEMPERATURE COEFFICIENT ppm/K	TOLERANCE %	RESISTANCE RANGE $\Omega$	E-SERIES
PMM0204	0.125	100	5	0.1, 0.25	100R - 100K	96 - 192
PMM0204	0.125	100	10	0.1, 0.25	100R - 221K	96 - 192
PMM0204	0.125	100	15	0.1, 0.25	100R - 221K	96 - 192
PMM0204	0.125	100	25	0.1, 0.25	100R - 221K	96 - 192
PMM0204	0.125	100	50	0.1, 0.25	100R - 221K	96 - 192

<sup>1)</sup> Power rating depends on the maximum temperature at the solder point, the component placement density and the substrate material

<sup>2)</sup> Rated voltage:  $\sqrt{P \times R}$

• TC  $\leq$  10ppm/°C: temperature range is - 10°C to + 85°C

• Coating: green

• Without TC-band

• Marking : see appropriate catalog or web page

### TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	PMM0204
Rated Dissipation at 70°C	W	0.125
Limiting Element Voltage <sup>2)</sup>	$V_{\cong}$	100
Insulation Voltage (1 min)	$V_{\text{dc/ac peak}}$	200
Thermal Resistance <sup>3)</sup>	K/W	$\leq$ 220
Insulation Resistance	$\Omega$	$\geq$ 10 10
Category Temperature Range	°C	- 10 / + 100
Failure Rate	$10^{-9}/\text{h}$	$<$ 1
Weight / 1000pcs	g	18

<sup>2)</sup> Rated voltage:  $\sqrt{P \times R}$

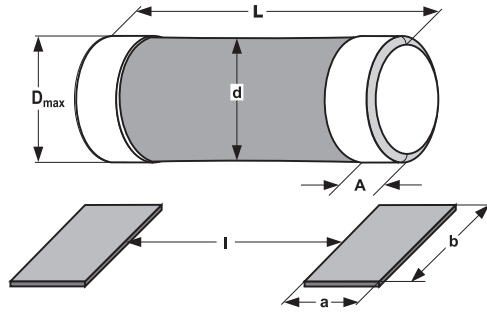
<sup>3)</sup> Based on measurements on test board acc. to EN 140000

**PACKAGING:** see SMM0204

### ORDERING INFORMATION

<b>PMM0204</b>	<b>25</b>	<b>562R</b>	<b>.1%</b>	<b>B1</b>
MODEL	TC ppm / K	RESISTANCE VALUE $\Omega$	TOLERANCE $\pm$ %	PACKAGING B1-Blister tape 1000 pcs

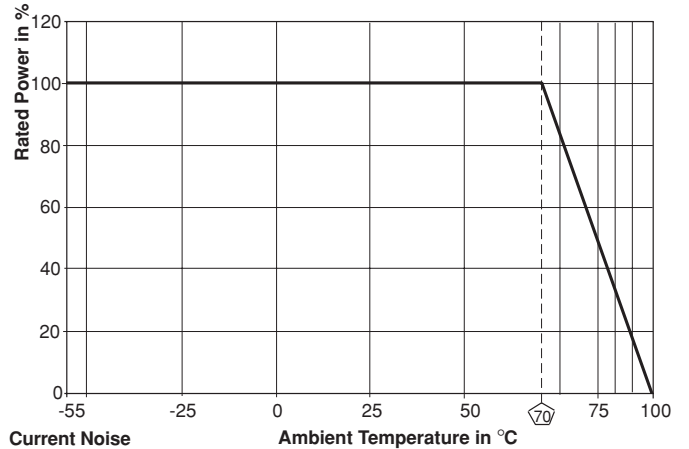
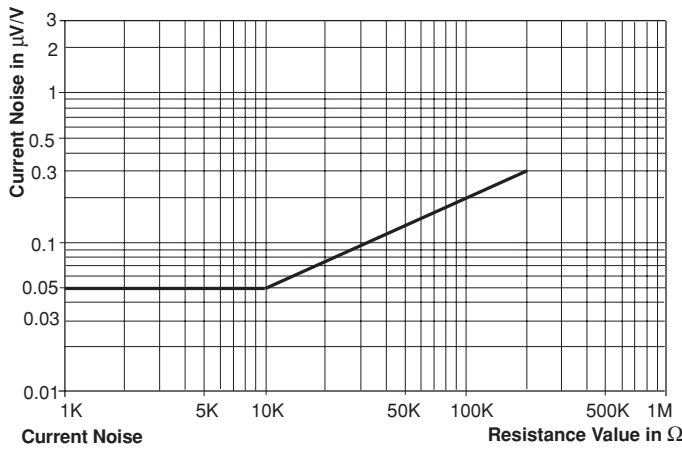
**DIMENSIONS**



MODEL	DIMENSIONS [in millimeters]				
	D <sub>max</sub>	d *	L	A <sub>max</sub>	A <sub>min</sub>
PMM0204	1.4	D -0.15	3.6 - 0.15	0.85	0.5

\* d measured in the middle of the resistor

MODEL	SOLDER PAD DIMENSIONS [in millimeters]					
	REFLOW SOLDERING			WAVE SOLDERING		
	a	b	l	a	b	l
PMM0204	1.0	1.6	2.2	1.2	1.6	2.2



PERFORMANCE		
TEST	CONDITIONS OF TEST	TEST RESULTS
Endurance Test at 70°C IEC 60115-1 4.25.1	1000 hours at 70°C, 1.5 hours "ON", 0.5 hours "OFF"	≤ ± 0.1 %
Endurance at UCT IEC 60115-1 4.25.3	1000 hours at 125 °C without load	≤ ± 0.1 %
Overload Test IEC 60115-1 4.13	Short time overload for 2 seconds 2.5 x rated voltage or ≤ 2 x limiting element voltage	≤ ± 0.02 %
Thermal Shock IEC 60115-1 4.19 IEC 60068-2-14	Rapid change between upper and lower category temperature	≤ ± 0.02 %
Damp Heat Steady State IEC 60115-1 4.24 IEC 60068-2-3	56 days at 40°C and 93% relative humidity	≤ ± 0.2 %
Resistance to Soldering Heat IEC 60115-1 4.18 IEC 60068-2-20	10 seconds at 260°C solder bath temperature	≤ ± 0.05 %

APPLICABLE SPECIFICATIONS
<ul style="list-style-type: none"> <li>• CECC40000 / 40400 / 40401-803</li> <li>• EN140400 / IEC 60115 – 1</li> </ul>