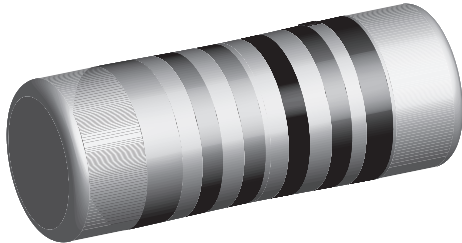


## Metal Film, Cylindrical Resistors



### FEATURES

- Special stabilized metal film on high quality ceramic
- Very low TC and tight tolerances
- Excellent long term stability
- Suitable for precision measuring techniques and precision controls
- Pure tin termination on nickel barrier, plated on press fit steel caps
- Compatible with lead (Pb)-free and lead containing soldering processes
- Lead (Pb)-free and RoHS compliant



### STANDARD ELECTRICAL SPECIFICATIONS

MODEL	POWER RATING <sup>1)</sup> $P_{70}$ W	LIMITING ELEMENT VOLTAGE <sup>2)</sup> DC or AC rms V	TEMPERATURE COEFFICIENT ppm/K	TOLERANCE %	RESISTANCE RANGE $\Omega$	E-SERIES
PMM0207	0.4	250	$\pm 5$	$\pm 0.1; \pm 0.25$	100R - 100K	192
PMM0207	0.4	250	$\pm 10$	$\pm 0.1; \pm 0.25$	100R - 100K	192
PMM0207	0.4	250	$\pm 15$	$\pm 0.1; \pm 0.25$	100R - 511K	24 - 192
PMM0207	0.4	250	$\pm 25$	$\pm 0.25; \pm 0.5$	100R - 511K	24 - 192

#### Note

1. Permissible dissipation depends on the maximum temperature at the solder point, the component placement density and the substrate material.
2. Rated voltage:  $\sqrt{P \times R}$ .
- $TC \leq 10$  ppm/K: temperature range is - 10 °C to + 85 °C
- marking: According to IEC 60062; see also datasheet "surface mount resistor marking" (document number: 20020)

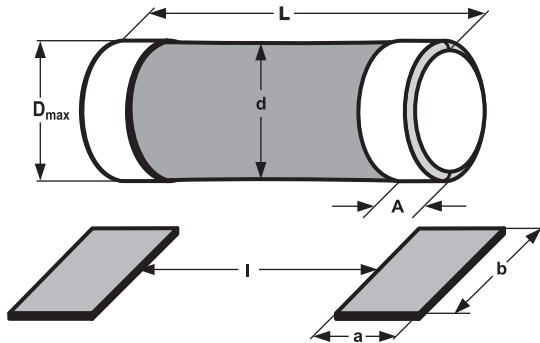
### TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	PMM0207
Rated Dissipation at 70 °C	W	0.4
Limiting Element Voltage, DC or AC rms	V	250
Insulation Voltage (1 min), DC or AC peak	V	> 400
Thermal Resistance <sup>3)</sup>	K/W	$\leq 140$
Insulation Resistance	$\Omega$	$\geq 10^{10}$
Category Temperature Range	°C	- 55 to + 125
Failure Rate	$10^{-9}/h$	< 1
Weight/1000 pcs	g	77

#### Note

3. Based on measurements on test board acc. to EN 140400.

**DIMENSIONS**



MODEL	DIMENSIONS [in millimeters]				
	D <sub>max</sub>	d*	L	A <sub>max</sub>	A <sub>min</sub>
PMM0207	2.2	D - 0.2	5.8 - 0.3	1.2	0.6

\* d measured in the middle of the resistor

MODEL	SOLDER PAD DIMENSIONS [in millimeters]					
	REFLOW			WAVE SOLDERING		
	a	b	l	a	b	l
PMM0207	1.8	2.5	2.9	2.4	2.5	2.8

**PART NUMBER AND PRODUCT DESCRIPTION<sup>1)</sup>**

PART NUMBER<sup>2)</sup>: PMM02070E5620CBP00

P	M	M	0	2	0	7	0	E	5	6	2	0	C	B	P	0	0
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MODEL/SIZE <b>PMM0207</b>	SPECIAL CHARACTER 0 = neutral	TC G = ± 5 ppm/K F = ± 10 ppm/K E = ± 15 ppm/K D = ± 25 ppm/K	VALUE 3 digit value 1 digit multiplier 0000 = Jumper Multiplier 0 = *10 <sup>0</sup> 1 = *10 <sup>1</sup> 2 = *10 <sup>2</sup> 3 = *10 <sup>3</sup>	TOLERANCE B = ± 0.1 % C = ± 0.25 % D = ± 0.5 %	PACKING <sup>3)</sup> BP BS	SPECIAL up to 2 digits 00 = standard
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PRODUCT DESCRIPTION: PMM0207 15 562R 0.25% BP

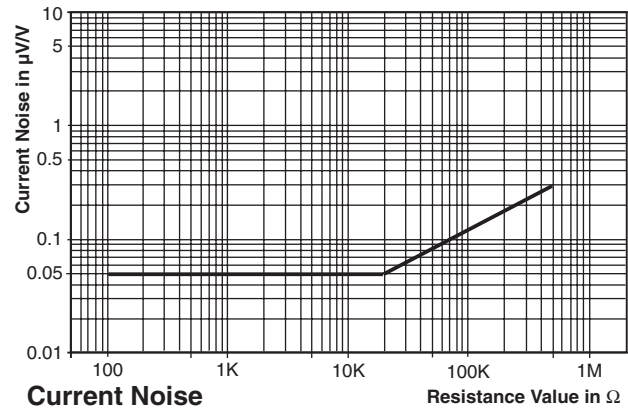
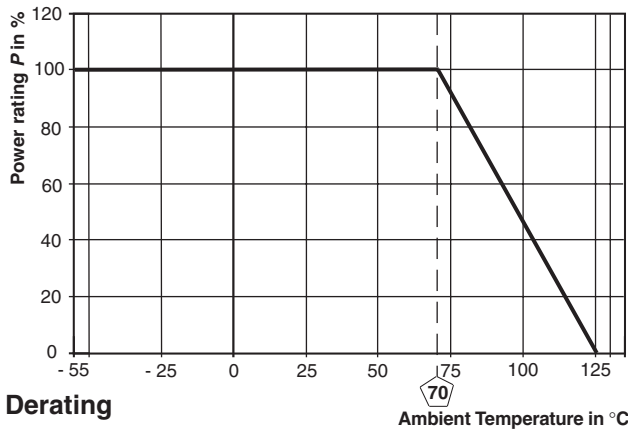
<b>PMM0207</b>	<b>15</b>	<b>562R</b>	<b>0.25 %</b>	<b>BP</b>
MODEL	TC	RESISTANCE VALUE	TOLERANCE	PACKING <sup>3)</sup>
<b>PMM0207</b>	± 5 ppm/K ± 10 ppm/K ± 15 ppm/K ± 25 ppm/K	<b>100R</b> = 100 Ω <b>221K</b> = 221K Ω	± 0.1 % ± 0.25 % ± 0.5 %	<b>BP</b> <b>BS</b>

**Note**

- Products can be ordered using either the PRODUCT DESCRIPTION or the PART NUMBER.
- The PART NUMBER is shown to facilitate the introduction of a unified part numbering system. Currently, this PART NUMBER is applicable in the Americas only.
- Please refer to table PACKING, see below.

PACKING			
MODEL	BLISTER TAPE ON REEL ACC. IEC 60286-3		
	DIAMETER	PIECES/REEL	CODE
PMM0207	180 mm/7"	1500	BP
	330 mm/13"	7500	BS

Further information about PACKING, see also datasheet "surface mount resistor packing" (document number: 20014).



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 and IEC 60068-2-14	Rapid change between upper and lower category temperature, 5 cycles	≤ 0.02 %
Damp Heat Steady State IEC 60115-1, 4.24 and IEC 60068-2-78	56 days at 40 °C and 93 % relative humidity	≤ 0.2 %
Resistance to Soldering Heat IEC 60115-1, 4.18 and IEC 60068-2-58	10 seconds at 260 °C solder bath temperature	≤ 0.05 %

APPLICABLE SPECIFICATIONS
<ul style="list-style-type: none"> <li>• EN 140401-803</li> <li>• EN 140400</li> <li>• EN 60115-1</li> </ul>



## Disclaimer

All product specifications and data are subject to change without notice.

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