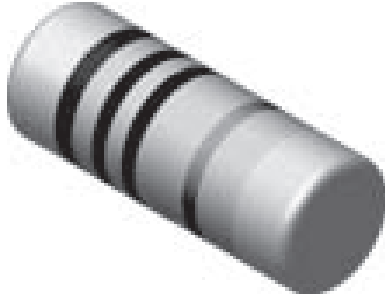


Metal Film, Cylindrical Resistors



FEATURES

- Metal film resistor with high power rating
- Stable metal film on high quality ceramic
- Good thermal distribution
- Force fitted steel caps, tin plated on nickel barrier
- Reliable solderable terminations to facilitate surface mounting.

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	POWER RATING $P_{70^{\circ}\text{C}}^{1)}$ W	LIMITING ELEMENT VOLTAGE MAX. ²⁾ V_{\cong}	TEMPERATURE COEFFICIENT ppm/K	TOLERANCE %	RESISTANCE RANGE Ω	E-SERIES
SMM0207	1.0	350	50	0.5	1R0 – 2M21	24 – 96
SMM0207	1.0	350	50	1	1R0 – 10M	24 – 96
SMM0207	1.0	350	100	5	R16 – R91	24

Zero-Ohm-Resistor : OMM0207 $R_{\text{max}} = 10\text{m}\Omega$ $I_{\text{max}} = 5\text{A}$

¹⁾ Power rating depends on the maximum temperature at the solder point, the component placement density and the substrate material.

²⁾ Rated voltage: $\sqrt{P \times R}$

- Further values and tolerances on request
- Coating: light green
- Marking: see appropriate catalog or web page
- Zero ohm resistor has one black band only

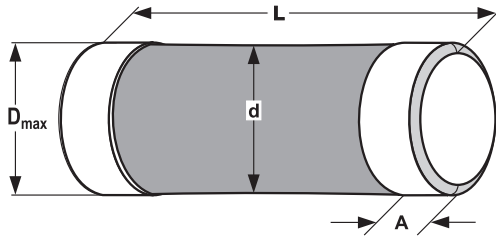
TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	SMM0207
Rated Dissipation at 70 °C	W	1
Limiting Element Voltage ²⁾	V_{\cong}	350
Insulation Voltage (1 min)	$V_{\text{dc/ac peak}}$	> 500
Thermal Resistance	K/W	see table
Insulation Resistance	Ω	$\geq 10^{11}$
Category Temperature Range	°C	- 55 / + 125 (+ 155)
Failure Rate	10^{-9} /h	< 5
Weight / 1000pcs	g	77

ORDERING INFORMATION

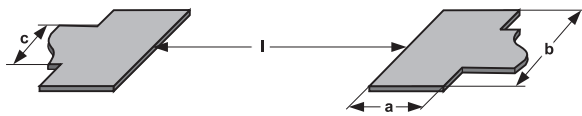
SMM0207	50	562R	1%	BP
MODEL	TC ppm / K	RESISTANCE VALUE Ω	TOLERANCE \pm %	PACKAGING BP-Blistertape 1500 pcs

DIMENSIONS



MODEL	DIMENSIONS [in millimeters]				
	D _{max}	d *	L	A _{max}	A _{min}
SMM0207	2.2	D -0.2	5.8 - 0.3	1.2	0.6

* d measured in the middle of the resistor

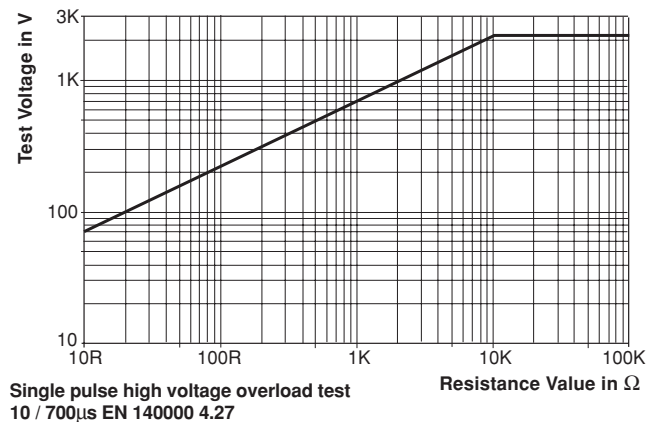
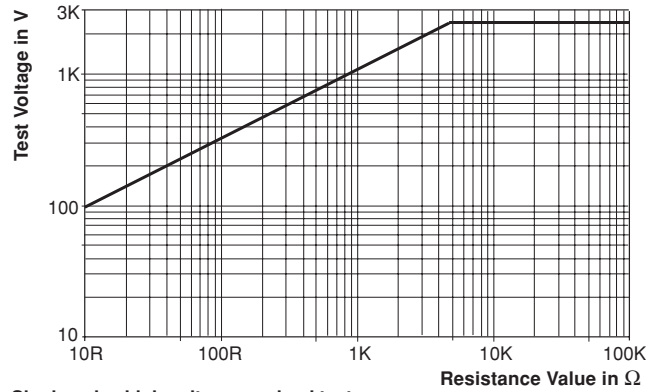
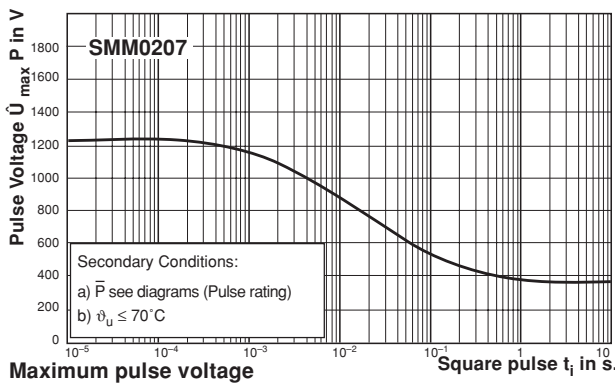
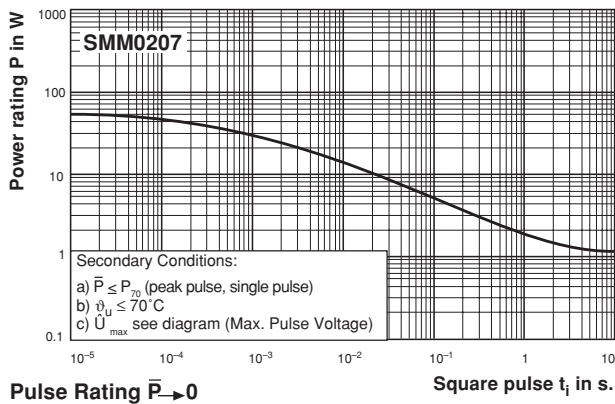
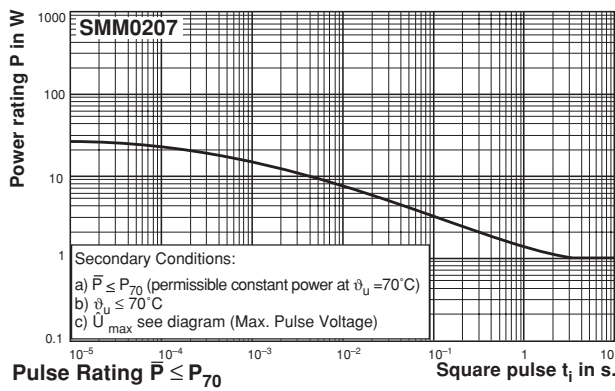
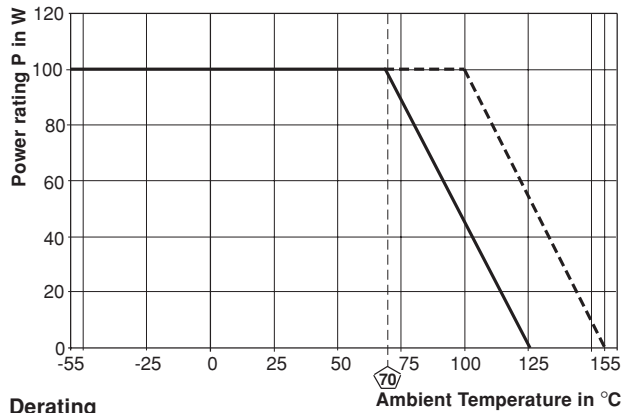


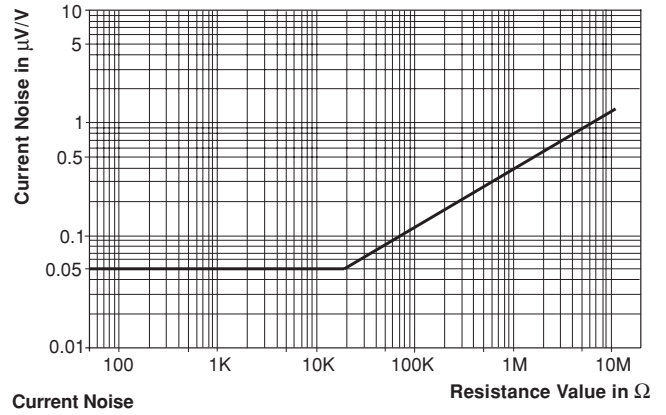
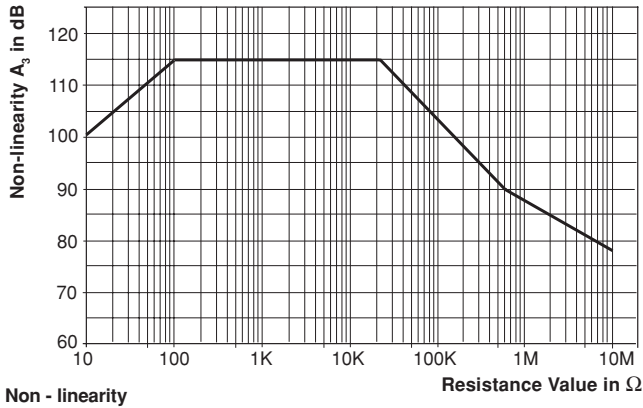
SOLDER PAD DIMENSIONS [in millimeters]					
a x b (mm)	LINE-WIDTH C (mm)	P ₇₀ for 35μ (W)	R _{th} for 35μ (K/W)	P ₇₀ for 70μ (W)	R _{th} for 70μ (K/W)
6 x 6	6	0.82	103	0.99	86
3 x 3	3	0.70	121	0.82	104
2 x 3	2	0.62	137	0.71	120
3 x 3	2	0.65	131	0.75	114
1 x 3	1	0.51	166	0.58	147
3 x 3	1	0,57	148	0.63	134
2.4 x 2	0.5	0.46	184	0.50	171
2.4 x 2	0.5	0.48	177	0.52	163

• Line length 30mm min, l = 2.8mm

PACKAGING						
MODEL	REEL				BULK	
	TAPE WIDTH	DIAMETER	PIECES / REEL	CODE	LOOSE IN PLASTIC CONTAINER PIECES / MAGAZINE	
					PIECES	CODE
SMM0207	12mm	180mm	1500	BP	1000	L1
OMM0207	Blister tape	330mm	7500	BS		

• Further information about packaging see appropriate catalog or web page.





PERFORMANCE		
TEST	CONDITIONS OF TEST	TEST RESULTS ¹⁾
Endurance Test at 70°C IEC 60115-1 4.25.1	1000 hours at 70°C 1.5 hours "ON" 0.5 hours "OFF"	≤ ± 0.5 %
Endurance at UCT IEC 60115-1 4.25.3	1000 hours at 125 °C without load	≤ ± 0.5 %
Overload Test IEC 60115-1 4.13	Short time overload for 2 seconds 2.5 x rated voltage or ≤ 2 x limiting element voltage	≤ ± 0.5 %
Thermal Shock IEC 60115-1 4.19 IEC 60068-2-14	Rapid change between upper and lower category temperature	≤ ± 0.1 %
Damp Heat Steady State IEC 60115-1 4.24 IEC 60068-2-3	56 days at 40°C and 93% relative humidity	≤ ± 0.5 %
Resistance to Soldering Heat IEC 60115-1 4.18 IEC 60068-2-20	10 seconds at 260°C solder bath temperature	≤ ± 0.25 %

¹⁾ for a resistance range from 10Ω to 1MΩ

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