

TYPICAL PROPERTIES OF OTHER RESISTANCE HEATING ELEMENT MATERIALS

Basic composition	Resistivity, n.m	Average change in resistance, %, from 20 °C to:				Thermal expansion, $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$, from 20 °C to:			Tensile strength	Density
		260 °C	540 °C	815 °C	1095 °C	100 °C	540 °C	815 °C	MPa	g/cc
Molybdenum	52	+110	+238	+366	+508	4.8	5.8	...	690 to 2160	10.2
Platinum	105	+85	+175	+257	+305	9.0	9.7	10.1	345	21.5
Tantalum	125	+82	+169	+243	+317	6.5	6.6	...	345 to 1240	16.6
Tungsten	55	+91	+244	+396	+550	4.3	4.6	4.6	3380 to 6480	19.3
Nonmetallic heating-element materials										
Silicon carbide	995 to 1995	-33	-33	-28	-13	4.7	...	...	28	3.2
Molybdenum disilicide	370	+105	+222	+375	+523	9.2	...	...	185	6.2
M_0Si_2 + 10% ceramic additives	270	+167	+370	+597	+853	13.1	14.2	14.8	...	5.6
Graphite	9100	-16	-18	-13	-8	1.3	...	...	1.8	2.3