



Data Sheet

Product Description

EMS Material Designation	P500R
ASTM Type	--
Number of layers	3
Standard Marking	TRUFLEX P500R
Remarks	High Resistivity, High Flexivity



Chemical Composition

	Grade	Chemistry
High Expansion Alloy	Alloy P	72% Mn, 18% Cu, 10% Ni
Center Layer	Alloy 50	50% Ni, Bal Fe
Low Expansion Alloy	Alloy 10	36% Ni, Bal Fe

Thermostatic Properties

	ENGLISH		METRIC	
ASTM Flexivity (50-200°F)	202	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature (10-93°C)	--		36.4	$\times 10^{-6}$ (mm/mm)/°C
Maximum Sensitivity Temperature Range	0 to 400	°F	-20 to 200	°C
Useful Deflection Temperature Range	-100 to 500	°F	-70 to 260	°C
Recommended Maximum Temperature	800	°F	430	°C
Electrical Resistivity @75°F (24°C)	480 to 520	OCMF*	0.798 to 0.864	μ ohms-m

Physical Properties

	ENGLISH		METRIC	
Density	0.281	Lb/in ³	7.77	g/cm ³
Modulus of Elasticity (E)	21	Msi	145	GPa

*Ohms-Circular-Mil / Foot

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