



Data Sheet

Product Description

EMS Material Designation	P90R
ASTM Type	--
Number of layers	4
Standard Marking	TRUFLEX P90R
Remarks	Low Resistivity, High Flexivity, General Use 0 to 400°F (-20 to 200°C)



Chemical Composition

	Grade	Chemistry
High Expansion Alloy	Alloy P	72%Mn-18%Cu-10%Ni
Center Layer	Copper	Cu
Low Expansion Alloy	Alloy 10	64%Fe-Bal Ni

Thermostatic Properties

	ENGLISH		METRIC	
ASTM Flexivity (100-300°F)	204	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature (38-149°C)	--		36.7	$\times 10^{-6}$ (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	700	°F	370	°C
Electrical Resistivity @ 75°F (24°C)	84.6 to 95.4	OCMF*	0.141 to 0.159	μ ohms-m

Physical Properties

	ENGLISH		METRIC	
Density	0.281	Lb/in ³	7.78	g/cm ³
Modulus of Elasticity (E)	19.0	Msi	131	GPa

*Ohms-Circular-Mil / Foot