



Data Sheet

Product Description

EMS Material Designation	P70R
ASTM Type	TM34
Number of layers	3
Standard Marking	TRUFLEX P70R
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	36% Ni, Bal Fe

Thermostatic Properties

	ENGLISH		METRIC	
ASTM Flexivity (50-200°F)	214	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature (10-93°C)	--		38.5	$\times 10^{-6}$ (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)	65 to 75	OCMF*	0.108 to 0.125	μ ohms-m

Physical Properties

	ENGLISH		METRIC	
Density	0.283	Lb/in ³	7.83	g/cm ³
Modulus of Elasticity (E)	19.0	Msi	131	GPa

*Ohms-Circular-Mil / Foot