



## Data Sheet

### Product Description

EMS Material Designation	P175R
ASTM Type	--
Number of layers	3
Standard Marking	TRUFLEX P175R
Remarks	Intermediate 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	C50500	Cu-1.3%Sn
Low Expansion Alloy	Alloy 10	64%Fe-Bal Ni

### Thermostatic Properties

	ENGLISH		METRIC	
ASTM Flexivity (100-300°F)	209	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature (38-149°C)	--		37.6	$\times 10^{-6}$ (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	500	°F	260	°C
Electrical Resistivity @ 75°F (24°C)	164.5 to 185.5	OCMF*	0.273 to 0.308	$\mu$ ohms-m

### Physical Properties

	ENGLISH		METRIC	
Density	0.278	Lb/in <sup>3</sup>	7.70	g/cm <sup>3</sup>
Modulus of Elasticity (E)	19.0	Msi	131	GPa

\*Ohms-Circular-Mil / Foot

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