



## Data Sheet

### Product Description

<b>EMS Material Designation</b>	<b>P100R</b>
<b>ASTM Type</b>	--
<b>Number of layers</b>	<b>3</b>
<b>Standard Marking</b>	<b>TRUFLEX P100R</b>
<b>Remarks</b>	<b>Low Resistivity, High Flexivity, General Use 0 to 400°F (-20 to 200°C)</b>



### Chemical Composition

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

### Thermostatic Properties

	ENGLISH		METRIC	
ASTM Flexivity (50-200°F)	216	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature (10-93°C)	--		38.9	$\times 10^{-6}$ (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)	96 to 113	OCMF*	0.141 to 0.159	$\mu$ ohms-m

### Physical Properties

	ENGLISH		METRIC	
Density	0.282	Lb/in <sup>3</sup>	7.81	g/cm <sup>3</sup>
Modulus of Elasticity (E)	19.0	Msi	131	GPa

\*Ohms-Circular-Mil / Foot

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