



## Data Sheet

### Product Description

EMS Material Designation	P675R
ASTM Type	TM2
Number of layers	2
Standard Marking	TRUFLEX P675R



### Remarks

- \* Most active material available
- \* Due to high manganese content of high expansion alloy, this material susceptible to stress corrosion.
- \* Prolonged exposure to high humidity, moisture, and saline solutions should be avoided

### Chemical Composition

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

### Thermostatic Properties

		ENGLISH		METRIC	
ASTM Flexivity	(50-200°F)	217	$\times 10^{-7}$ (in/in)/°F	--	
	(100-300°F)	211	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature	(10-93°C)	--		39.1	$\times 10^{-6}$ (mm/mm)/°C
	(38-149°C)	--		38.0	$\times 10^{-6}$ (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)	641 to 709	OCMF*		1.07 to 1.18	$\mu$ ohms-m

### Physical Properties

	ENGLISH		METRIC	
Density	0.275	Lb/in <sup>3</sup>	7.61	g/cm <sup>3</sup>
Modulus of Elasticity (E)	19.0	Msi	131	GPa

\*Ohms-Circular-Mil / Foot