

Product Description

EMS Material Designation	F50R
ASTM Type	TM26
Numer of Layers	3
Standard Marking	TRUFLEX F50R
Remarks	Low Electrical Resistivity and Medium Flexivity

Chemical Composition

	<u>Grade</u>	<u>Chemistry</u>
High Expansion Alloy	Alloy B	22% Ni, 3% Cr, Bal Fe
Center Layer	Copper	Cu
Low Expansion Alloy	Alloy 10	36% Ni, Bal Fe

Thermostatic Properties

	ENGLISH	METRIC
ASTM Flexivity (50-200°F)	147 X 10 ⁻⁷ (in/in)/°F	
(100-300°F)	143 X 10 ⁻⁷ (in/in)/°F	
Specific Curvature (10-93°C)		26.5 X 10 ⁻⁶ (mm/mm)/°C
(38-149°C)		25.7 X 10 ⁻⁶ (mm/mm)/°C
Maximum Sensitivity Temperature Range	0 to 300°F	-20 to 150°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)	46.5 to 53.5 OCMF*	0.077 to 0.089 u-ohm-m

Physical Properties

	ENGLISH	METRIC
Density	0.300 Lb/in ³	8.32 g/cm ³
Modulus of Elasticity (E)	24 Msi	165 GPa

*Ohms-Circular-Mil / Foot