



Data Sheet

Product Description

EMS Material Designation	F90R
ASTM Type	TM28
Number of layers	3
Standard Marking	TRUFLEX F90R
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)	148	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature (10-93°C)	--		26.6	$\times 10^{-6}$ (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° (24°C)	85.5 to 94.5	OCMF*	0.142 to 0.157	μ ohms-m

Physical Properties

	ENGLISH		METRIC	
Density	0.298	Lb/in ³	8.24	g/cm ³
Modulus of Elasticity (E)	25.0	Msi	172	GPa

*Ohms-Circular-Mil / Foot