



Data Sheet

Product Description

EMS Material Designation	E70R20
ASTM Type	--
Number of layers	3
Standard Marking	--
Remarks	Low Electrical Resistivity and Medium Flexivity



Chemical Composition

	<u>Grade</u>	<u>Chemistry</u>
High Expansion Alloy	Alloy E	25% Ni, 8.5% Cr, Bal Fe
Center Layer	Copper	Cu
Low Expansion Alloy	Alloy 20	40% Ni, Bal Fe

Thermostatic Properties

	ENGLISH		METRIC	
ASTM Flexivity (50-200°F)	117	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature (10-93°C)	--		21.0	$\times 10^{-6}$ (mm/mm)/°C
Maximum Sensitivity Temperature Range	100 to 550	°F	38 to 288	°C
Useful Deflection Temperature Range	-100 to 700	°F	-72 to 371	°C
Recommended Maximum Temperature	700	°F	370	°C
Electrical Resistivity @ 75°F (24°C)	63 to 76	OCMF*	0.105 to 0.126	μ ohms-m

Physical Properties

	ENGLISH		METRIC	
Density	0.298	Lb/in ³	8.25	g/cm ³
Modulus of Elasticity (E)	23.0	Msi	159	GPa

*Ohms-Circular-Mil / Foot