



## Data Sheet

### Product Description

EMS Material Designation	F20R
ASTM Type	TM24
Number of layers	3
Standard Marking	TRUFLEX F20R
Remarks	Low Electrical Resistivity and Medium Flexivity



### Chemical Composition

	Grade	Chemistry
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)	131	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature (10-93°C)	--		23.6	$\times 10^{-6}$ (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°F (24°C)	18 to 22	OCMF*	0.030 to 0.037	$\mu$ ohms-m

### Physical Properties

	ENGLISH		METRIC	
Density	0.309	Lb/in <sup>3</sup>	8.57	g/cm <sup>3</sup>
Modulus of Elasticity (E)	20.0	Msi	138	GPa

\*Ohms-Circular-Mil / Foot

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