



## Data Sheet

### Product Description

<b>EMS Material Designation</b>	<b>F70R</b>
<b>ASTM Type</b>	<b>TM27</b>
<b>Number of layers</b>	<b>3</b>
<b>Standard Marking</b>	<b>TRUFLEX F70R</b>
<b>Remarks</b>	<b>Low Electrical Resistivity and Medium Flexivity</b>



### Chemical Composition

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

### Thermostatic Properties

		ENGLISH		METRIC	
ASTM Flexivity	(50-200°F)	147	$\times 10^{-7}$ (in/in)/°F	--	
	(100-300°F)	145	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature	(10-93°C)	--		26.5	$\times 10^{-6}$ (mm/mm)/°C
	(38-149°C)	--		26.1	$\times 10^{-6}$ (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)		66 to 75	OCMF*	0.108 to 0.125	$\mu$ ohms-m

### Physical Properties

		ENGLISH		METRIC	
Density		0.299	Lb/in <sup>3</sup>	8.27	g/cm <sup>3</sup>
Modulus of Elasticity (E)		24.5	Msi	169	GPa

\*Ohms-Circular-Mil / Foot