Engineered Materials Solutions
Wickeder Group

Data Sheet

Product Description

EMS Material Designation	**P30R**
ASTM Type	**TM31**
Number of layers	**3**
Standard Marking	**TRUFLEX P30R**
Remarks	**Low electrical resistivity with high flexivity**

Chemical Composition

	Grade	**Chemistry**
High Expansion Alloy	Alloy P	72% Mn, 18% Cu, 10% Ni
Center Layer	Copper	Cu
Low Expansion Alloy	Alloy 10	36% Ni, Bal Fe

Thermostatic Properties	**ENGLISH**		**METRIC**	
ASTM Flexivity (50-200°F)	189	x 10^{-7} (in/in)/°F	--	
Specific Curvature (10-93°C)	--		34.0	X 10^{-6} (mm/mm)/°C
Maximum Sensitivity Temperature Range	0 to 400	°F	-20 to 200	°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)	27 to 33	OCMF*	0.045 to 0.055	µohms-m

Physical Properties	**ENGLISH**		**METRIC**	
Density	0.296	Lb/in^3	8.19	g/cm^3
Modulus of Elasticity (E)	19	Msi	131	GPa

***Ohms-Circular-Mil / Foot**

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