Engineered Materials Solutions
Wickeder Group

Data Sheet

Product Description

EMS Material Designation	**P35R**
ASTM Type	**--**
Number of layers	**3**
Standard Marking	**TRUFLEX P35R**
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)	200	x 10^{-7} (in/in)/°F	--	
	(100-300°F)	190	x 10^{-7} (in/in)/°F	--	
Specific Curvature	(10-93°C)	--		36.0	X 10^{-6} (mm/mm)/°C
	(38-149°C)	--		34.2	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)		32 to 38	OCMF*	0.053 to 0.063	μohms-m

Physical Properties	**ENGLISH**		**METRIC**	
Density	0.291	Lb/in^3	8.05	g/cm^3
Modulus of Elasticity (E)	19.0	Msi	131	GPa

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

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