Engineered Materials Solutions
Wickeder Group

Data Sheet

Product Description

EMS Material Designation	**E5**
ASTM Type	**TM5**
Number of layers	**2**
Standard Marking	**TRUFLEX E5**
Remarks	**Best all purpose 300° to 800°F (150° to 425°C)**

Chemical Composition

	Grade	**Chemistry**
High Expansion Alloy	Alloy E	25% Ni, 8.5% Cr, Bal Fe
Low Expansion Alloy	Alloy 50	50% Ni-Bal Fe

Thermostatic Properties		**ENGLISH**		**METRIC**	
ASTM Flexivity	(50-200°F)	64	x 10^{-7} (in/in)/^{o}F	--	
	(100-300°F)	64	x 10^{-7} (in/in)/^{o}F	--	
Specific Curvature	(10-93°C)	--		11.5	X 10^{-6} (mm/mm)/°C
	(38-149°C)	--		11.5	X 10^{-6} (mm/mm)/°C
Maximum Sensitivity Temperature Range		300 to 800	^{o}F	150 to 430	^{o}C
Useful Deflection Temperature Range		-100 to 1000	^{o}F	-70 to 540	^{o}C
Recommended Maximum Temperature		1000	^{o}F	540	^{o}C
Electrical Resistivity @ 75°F (24°C)		332 to 368	OCMF*	0.552 to 0.612	µohms-m

Physical Properties	**ENGLISH**		**METRIC**	
Density	0.297	Lb/in^3	8.22	g/cm^3
Modulus of Elasticity (E)	25.5	Msi	176	GPa

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

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