MATERION

DATA SHEET

BrushForm 158 Strip – Mill Hardened Tempers

Materion's BrushForm® 158 strip is a high-performance, heat treated spinodal copper-nickel-tin alloy designed to provide optimal drop test resistance and fatigue strength. It provides excellent flatness and stiffness coupled with high resistance to vibration, fatigue, and impact loading. This makes it ideal for voice coil motor springs in optical image stabilization systems.

Chemical Composition (Weight Percent)

Alloy	Nickel	Tin	Copper
BrushForm 158 Strip	14.5 – 15.5	7.5 – 8.5	Balance

Typical Physical Properties

Elastic Modulus	Density	Typical Electrical Conductivity	Coefficient of Thermal Expansion	Relative Magnetic Permeability	Poisson's Ratio
128 GPa	9.00 g/cm^3	7% IACS 4 MS/m	16.4 ppm/°C	< 1.01	0.3

Typical Mechanical Properties

Temper	Data Type	0.2% Offset Yield Strength (MPa)	Ultimate Tensile Strength (MPa)	Elongation (%) *	Hardness (HV)
TM10	Range	1135 - 1345	1205 - 1450	1.0 min.	370 min.
TM16	Range	1365 - 1462	1400 - 1510	1.0 min.	375 - 450
	Design/Engineering Nominal Value	1413	1455	1.5	400

*Percent elongation valid only for strip greater than 0.10 mm thick.

Standard Availability

Mill hardened tempered strip: 0.025 – 0.12 mm gauge.

Industry Standards and Specifications

UNS C72900

Related Information

Additional technical information on BrushForm 158 strip may be obtained by phoning +1.800.375.4205. For pricing and availability, phone +1.800.323.2438.

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