MATERION

DATA SHEET

BrushForm® 158 Strip
TM16 Temper

RoHS COMPLIANT

Materion Performance Alloys' BrushForm® 158 Strip is a high-performance, heat treated spinodal copper nickel tin alloy designed to provide optimal formability and strength characteristics in conductive spring applications such as electronic connectors, switches, and sensors. TM16 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

PHYSICAL PROPERTIES (PRELIMINARY)

Elastic Modulus	Density	Typical Electrical Conductivity	Coefficient of Thermal Expansion	Relative Magnetic Permeability	Poisson's Ratio
18.5 x 10^6 psi 128 GPa	0.325 lb/in^3 9.00 g/cm^3	7% IACS 4 MS/m	9.1 ppm/°F 16.4 ppm/°C	<1.01	0.3

MECHANICAL PROPERTIES (PRELIMINARY)

Temper	Data Type	0.2% Offset Yield Strength ksi (MPa)	Ultimate Tensile Strength ksi (MPa)	Elongation (%) *	Hardness (HV)
TM16	Specification Range	198-212 (1365-1462)	203-219 (1400-1510)	1.0 min.	375-450
	Design/Engineering Nominal Value	205 (1413)	211 (1455)	1.5	400

* Percent elongation valid only for strip greater than 0.004" (0.10 mm) thick.

STANDARD AVAILABILITY

Mill Hardened Tempered Strip: 0.0010" (0.0254 mm) – 0.020" (0.5mm) gauge.

SPECIFICATIONS AND STANDARDS

UNS C72900, ASTM B740

CONTACT INFORMATION

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MATERION CORPORATION
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North American Sales	Pricing, availability, tolerances, etc	800-323-2438
Technical Service	Properties, application and design assistance, fabrication and processing assistance, etc.	800-375-4205 +(1) 216-692-3108
International Sales World-wide Distribution	Link to US and international distributors and international sales offices	

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