M Series

For transducer manufacturers

Data sheet

Special features

- **Electrical strain gage with high resistance to alternating loads**
- **High temperature range (-200 … +300°C)**
- **Only customer specific designs**

Specifications

SG construction	Foil strain gauge
Carrier	Glass fiber reinforced phenolic (35 ±10) µm
Grid foil	Modco (CrNi) (5 µm)
Encapsulation	Polyimide film (25 ±5) µm
Connections	Solder pads, optional with leads
Resistance	350 … 5,000 Ohm (depended on design)
Resistance tolerance	±0.3%
Gage factor	Approx. 2.2
Gage factor tolerance	±1.5% for grid length <3 mm ±0.7% for grid length ≥3 mm
Reference temperature	23 °C
Operating temperature range static	-200 °C … 250 °C
Operating temperature range dynamic	-200 °C … 300 °C
Temperature response α for ferritic steel (1) α for aluminum (3)	 10.8 ppm/K (6.0 ppm/°F) 23 ppm/K (12.8 ppm/°F)
Temperature response tolerance	± 0.3 ppm/K
Fatigue life[1)]	$>10^7$ cycles at 2,000 µm/m
Maximum elongation Positive direction Negative direction	 10,000 µm/m (1%) 15,000 µm/m (1.5%)
Min. bending radius	5 mm
Recommended adhesive	EP310N or P250
Option “Stick-On”	Pre-coated adhesive layer on request (P250)

1) Maximum zero point drift ±100 µm/m

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