



MTC (Micro-Thermocouples)

Product Description

Our Micro-Thermocouples are flexible fine gage thermocouples used whenever fast, accurate temperature measurements are required. The thermocouple consists of two dissimilar metals, joined together at one end. A small voltage is produced by the two metals, which can be measured and interpreted by a thermocouple thermometer. The dissimilar metals are individually insulated, and an overcoat is present to maintain intimate bifilar configuration.

Features

- Junction Types: Soldered
- Joint Encapsulation Types: Polymer Encapsulated, Bare
- Thermocouple Types T
- Thermocouple Gauges: 44 AWG, 40 AWG, 38 AWG, 36 AWG
- Wire Insulation: Polyetherimide

Applications

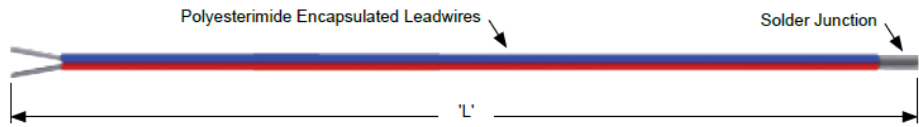
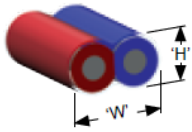
- Medical



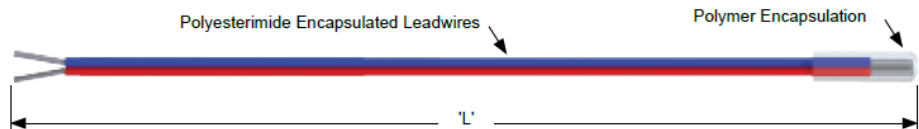
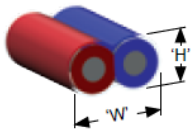
MTC (MICRO-THERMOCOUPLES)

Encapsulation Types

Soldered Junction, Non-Insulated



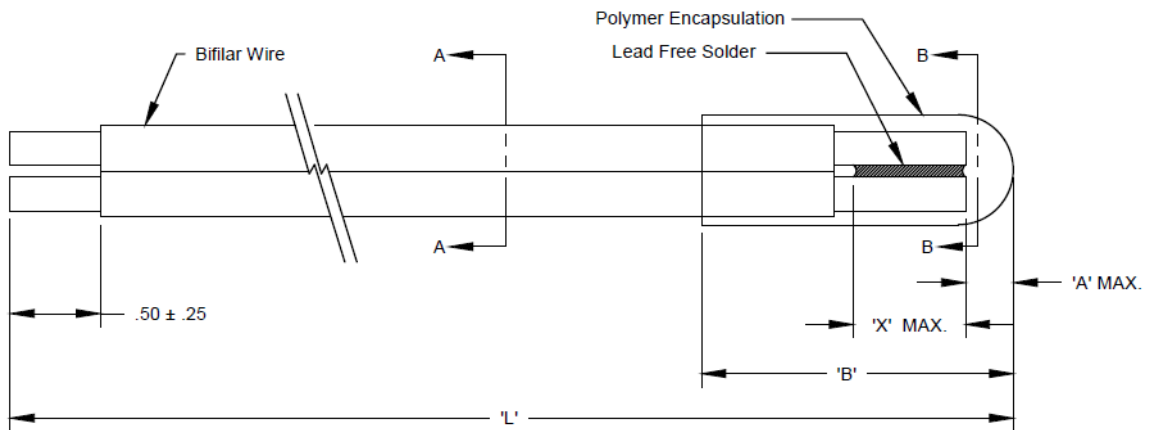
Soldered Junction, Insulated



Commonly Types

Type	AWG	Insulation Type	Color	Limits of Error
T	40	Polyesterimide	Green/Red	Special
T	44	Polyesterimide	Green/Red	Special
T	44	Polyesterimide	Black/Red	Special
T	36	Polyesterimide	Green/Red	Standard

Dimensions



- **Wire Strip Length (Tail): 0.50" ± 0.25"**
- **Solder Joint Length (X): 0.10" Max.**
- **Encapsulation Length (B): 0.25" Max.**
- **Encapsulation Profile (A): 0.010" Max. for 44 AWG; 0.013" Max. for 40 AWG; 0.017" Max. for 36 AWG**
- **Wire length tolerance (L): ±3.0"**
- **Packaging: Sensors wrapped on white plastic spools**

MTC (MICRO-THERMOCOUPLES)

Customize parameter

Customize parameter	
L	Example: 100.0 = 100.0 inch; 62.5 = 62.5 inch
Encapsulation	Polymer Encapsulated / Bare
AWG	36 / 38 / 40 / 44
Type	T

MTC (MICRO-THERMOCOUPLES)

Ordering Information

FG	L(inch)	Encapsulation	AWG	Color	Max Temp	TYPE
R-10191-2	65	Polymer Encapsulated	44	Black red	180°C	T
R-10191-3	65	Polymer Encapsulated	44	Green red	180°C	T
R-10832-5	131	Bare	44	Green red	180°C	T
R-10832-7	131	Polymer Encapsulated	44	Green red	180°C	T
R-11047-1	71	Bare	40	Black red	155°C	T
R-11297-2	131	Polymer Encapsulated	40	Green red	180°C	T
R-12401-1	25	Polymer Encapsulated	40	Green red	180°C	T
R-12401-2	74	Polymer Encapsulated	40	Green red	180°C	T
R-13002-1	49	Polymer Encapsulated	36	Green red	180°C	T
R-13580-1	80	Polymer Encapsulated	40	Green red	180°C	T
R-13580-2	80	Polymer Encapsulated	40	Black red	180°C	T
R-13580-3	80	Polymer Encapsulated	40	Gold red	180°C	T
R-13580-4	80	Polymer Encapsulated	40	Blue red	180°C	T
R-13580-9	80	Bare	40	Green red	180°C	T
R-13580-10	80	Bare	40	Black red	180°C	T
R-13580-11	80	Bare	40	Gold red	180°C	T
R-13580-12	80	Bare	40	Blue red	180°C	T
R-14147-2	70	Bare	44	Black red	180°C	T
R-14554-1	131	Polymer Encapsulated	44	Green red	180°C	T
R-14555-1	131	Polymer Encapsulated	40	Green red	180°C	T
PF5040138-1	70.8	Bare	40	Green red	180°C	T
PF5040138-2	63	Bare	40	Green red	180°C	T
PF5040139-1	70.8	Polymer Encapsulated	40	Green red	180°C	T
PF5040139-2	78.7	Polymer Encapsulated	40	Green red	180°C	T
PF5040139-3	23.6	Polymer Encapsulated	40	Green red	180°C	T
PF5040139-4	63	Polymer Encapsulated	40	Green red	180°C	T

NORTH AMERICA

Measurement Specialties, Inc.,
a TE Connectivity Company
1711 139th Lane NW
Andover, MN 55304
Tel: +1 763 689 4870
Fax: +1 763 689 5033

customercare.ando@te.com

EUROPE

MEAS Deutschland GmbH
a TE Connectivity Company
Hauert 13
44227 Dortmund
Germany
Tel : +49 231 9740-0
Fax : +49 231 9740-20

customercare.dtmd@te.com

ASIA

Measurement Specialties (China), Ltd.,
a TE Connectivity Company
No. 368 Wulian 1st Road
Gongxing Town
Shuangliu, Chengdu
Sichuan, 610200
China
Tel: +86 (0) 28 8573 9088
Fax: +86 (0) 28 8573 9070

customercare.chdu@te.com

te.com/sensorsolutions

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