

Electronics

Probes

MPT Probes (Magic Wand)



Ideal-tek's new line of multy purpose tool for electronics, chemistry and watch making. Magic Wand can be used as: probe for lead-free soldering operations, positioning aid tool for assembly operations, spatula for applying adhesives, dosing chemicals in labs, stirring rod for the preparations of adhesives, solutions,..., scraper to remove solder masking agents, rubber latex, adhesive coatings.

Different materials available

150 mm long

MPT3.NY **Squared body: flat large fine tip and flat fine sharp tip; Made of High Performance Nylon (NY)**

General notes

- **PA66/GF50** polyamide 66 reinforced with 50 wt% glass fibre
- high strength, fatigue, wear and creep resistance

- heat stabilized, good heat capability
- good chemical resistance (oils, grease, fuels, non polar solvents); not resistant to strong acids, alkalis and hot water or steam
- insulative
- typical applications include plastic tweezers, plastic tip tweezers, MPT's, tool handles.

Mechanical properties

Elastic modulus +23°C:	1600 MPa	ASTM D790
Elastic modulus +60°C:	14000 MPa	ASTM D790
Elastic modulus +90°C:	8000 MPa	ASTM D790
Elastic modulus +120°C:	5000 MPa	ASTM D790
Tensile strength +23°C:	220 MPa	ISO 527
Tensile strength +60°C:	160 MPa	ISO 527
Tensile strength +90°C:	110 MPa	ISO 527
Tensile strength +120°C:	85 MPa	ISO 527
Izod-Impact strength (notched) +23°C:	140 J/m	ASTM D256
Charpy-Impact strength (unnotched):	85 kJ/m ²	DIN 53453

Thermal properties

Temp. of defl. under load (1.80 MPa):	235°C	ASTM D648
Temp. of defl. under load (0.45 MPa):	255°C	ASTM D648
Vicat softening temperature (50°C/h 50N):	250°C	ISO 306
Coef. of lin. therm expansion, normal:	7.00 E-6/°C	ASTM D696
Continuous Use Temperature	130°C	20'000h
Short Time Temperature	185°C	

Electrical properties

Comparative tracking index:	500 Volts	IEC 112
Electric strength (2mm):	21.0 kV/mm	IEC 243-1

Other properties

Density	1.57 g/ccm	ISO 1183
Water absorption in water 23°C (24h)	0.65%	ISO62