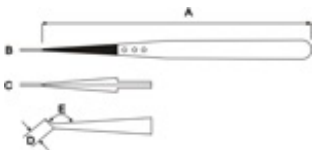
Electronics

Tweezers
249 Plastic Replaceable tips Tweezers

Strong tips

A 5" 130 mm
B 0.09" 2.2 mm
C 0.09" 2.2 mm



A249CF **Replaceable tips set**

General notes

- **PA66/CF30** polyamide 66 reinforced with 30 wt% carbon fibre
- heat stabilized
- very high rigidity, excellent tensile and flexural strength, fatigue and creep resistance
- low friction, self lubricating properties, excellent wear and abrasion resistance

- good heat capability
- good chemical resistance (oils, grease, fuels, non polar solvents); not resistant to strong acids, alkalis and hot water or steam
- ESD safe material, (avoid powder attraction, sparks generation, ignition sources).
- very low coefficient of linear thermal expansion
- typical applications include handling of sensitive components and devices (electronic components, micro-mechanical parts, glass and ceramic substrates, capillary, etc.)

Mechanical propetries

Flexural modulus +23°C:	17000 MPa	ASTM D 790
Flexural modulus +60°C:	12000 MPa	ASTM D 790
Flexural modulus +90°C:	9800 MPa	ASTM D 790
Flexural modulus +120°C	8000 MPa	ASTM D 790
Tensile strength +23°C	210 MPa	ISO 527
Tensile strength +60°C	159 MPa	ISO 527
Tensile strength +90°C	134 MPa	ISO 527
Tensile strength +120°C	117 MPa	ISO 527
Rockwell hardness M:	>100	ASTM D 785
Izod-Impact strength (notched) +23°C	70 J/m	ASTM D 785
Charpy-Impact strength (unnotched)	30 kJ/m²	DIN 53453

Thermal properties

Temp. of defl. uner load (1.80 MPa):	256°C	ASTM D648
Temp. of defl. uner load (0.45 MPa):	260°C	ASTM D648
Vicat softening temperature (50°C/h 50N)	254°C	ISO 306
Coef. of lin.therm expansion, normal:	2.80 E-5/°C	ASTM D 696
Continuous Use Temperature	130°C	20'000 h
Short Time Temperature	190°C	

Electrical properties

Surface resistivity	10² Ohm	100V
Comparative tracking index:	<100 Volts	IEC 112
Decay time:	< 0.1 sec	1000-10 V

Other properties

Density	1.28 g/ccm	ISO 1183
Water absorption in water 23°C (24h)	0.60%	ISo 62

Credits