

CONDUCTIVE BORON NITRIDE CERAMIC

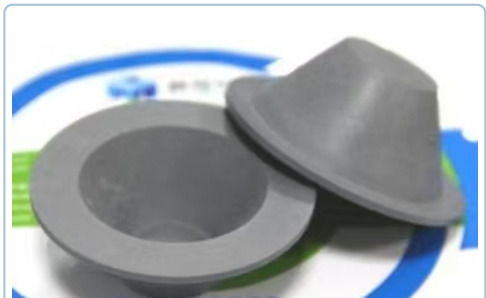
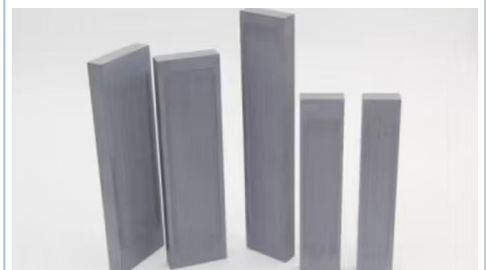
BN-T | Technical Datasheet



HEEGER MATERIALS

Engineered conductive ceramic for high-temperature, vacuum, metallization, and coating applications.

Typical Characteristics			BN-T
Chemical composition			BN+TiB ₂ +AlN
Density		g/cm ³	> 3.01
Modulus of elasticity		GPa	60-70
Flexural strength	Room temperature	MPa	> 150
Coefficient of thermal expansion	1450 deg C	10 ⁻⁶ /K	4-6
Thermal conductivity	20 deg C	W/(m.K)	100/40
Maximum service temperature	Oxidizing atmosphere	deg C	900
	Vacuum	deg C	1700
	Inert atmosphere	deg C	2000
Room-temperature resistivity		microOhm.cm	300-2000



KEY FEATURES

- Fine, dense structure produced through vacuum hot-press sintering.
- Excellent corrosion resistance for extended service life in demanding process conditions.
- Stable at elevated temperatures and low reactivity with molten metals.
- High oxidation resistance; operating temperature 400-500 deg C higher than comparable graphite materials.

TYPICAL APPLICATIONS

- Evaporation boats for vacuum metallization.
- Crucibles for high-temperature electronic coating operations.
- Crucibles and components for optical coating equipment.