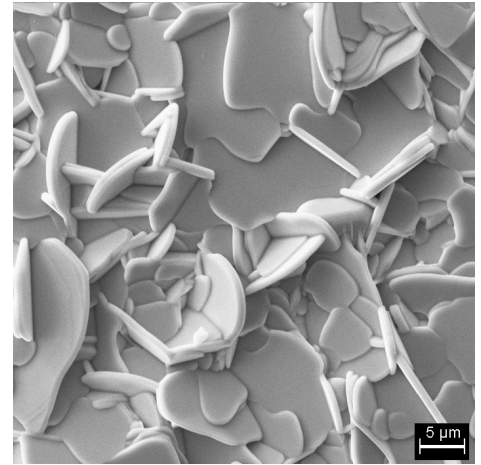


Pz46 (Lead-Free)

Bismuth Titanate
Piezoceramic Material

Description

Pz46 is a lead-free piezoceramic formulation based on the bismuth titanate system. It has been developed as a dedicated high-temperature material and is available for customers who are looking to replace the lead-containing piezoceramics in their applications.



Key Features and Benefits

- Lead-Free Product
- Stable Performance at High and Low Temperatures

Ideal Applications

- High Temperature
- High Frequency

Property	Symbol	Unit	Value
Relative Free Dielectric Constant (1 kHz)	K_{33}^{σ}	-	113
Dielectric Dissipation Factor (1 kHz)	$\tan\delta$	-	0.004
Curie Temperature	T_c	°C	650
Density	ρ	g/cm ³	6.39
Mechanical Quality Factor	Q_m	-	> 1000
Coupling Coefficients	k_p	-	0.02
	k_t	-	0.18
Piezoelectric Charge Coefficient (Displacement Coefficient)	d_{33}	pC/N	18.6
Frequency Constants	N_p	Hz·m	2490
	N_t	Hz·m	1910