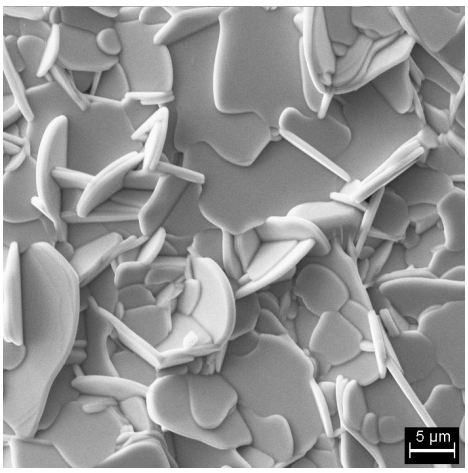
Data Sheet

Pz48 (Lead-Free)

Bismuth Titanate Piezoceramic Material



Description

Pz48 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}	-	126
Dielectric Dissipation Factor (1 kHz)	$\tan\delta$	-	0.003
Curie Temperature	T_C	°C	770
Density	ρ	g/cm^3	6.85
Mechanical Quality Factor	Q_m	-	> 2000
Coupling Coefficients	k_p	-	0.07
	k_t	-	0.20
Piezoelectric Charge Coefficient (Displacement Coefficient)	d_{33}	pC/N	20.1
Frequency Constants	N_p	Hz·m	2850
	N_t	Hz·m	2240