

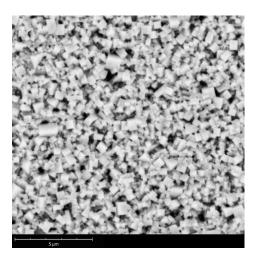
Data Sheet

Pz62 (Lead-Free)

KNN Piezoceramic Material

Description

Pz62 is a lead-free piezoceramic formulation based on the potassium sodium niobate system (KNN). It has been developed as a lead-free alternative to traditional soft-doped PZT ceramics and is available for customers who are looking to replace the lead-containing piezoceramics in their applications.



Key Features and Benefits

- Lead-Free Product
- Candidate for Replacing Soft-Doped PZT

Ideal Applications

- Underwater Receivers and Hydrophones
- Diagnostic Medical Ultrasound (Imaging, IVUS)
- Medical Doppler
- Non-Destructive Testing (NDT)
- Transducers for Flow and Level Meters
- Accelerometers

Property	Symbol	Unit	Value
Relative Free Dielectric Constant (1 kHz)	K_{33}^{σ}	-	1140
Dielectric Dissipation Factor (1 kHz)	tan δ	-	0.02
Curie Temperature	T_{C}	°C	333
Recommended Operating Range	T<	°C	230
Density	ρ	g/cm³	4.4
Mechanical Quality Factors	Q_{mp}	-	205
	Q_{mt}	-	-
Coupling Coefficients	k_{p}	-	0.40
	$k_{\rm t}$	-	0.49
Piezoelectric Charge Coefficient (Displacement Coefficient)	d ₃₃	pC/N	270
Frequency Constants	$N_{\rm p}$	Hz·m	2100
	$N_{\rm t}$	Hz·m	2280
Acoustic Impedance	$Z_{\rm a}$	MRayl	22.5