

## Piezo Kinetics 402 Lead Zirconate Titanate Piezoelectric

Category : Ceramic , Oxide , Titanium Oxide , Zirconium Oxide , Piezoelectric

### Material Notes:

Denoted as Navy Type I, it is designed to serve as a driver where high power and low losses are dictated by design. It is primarily well suited for ultrasonic cleaners and sonars. Elastic Compliance s11E (x 10<sup>-12</sup> m<sup>2</sup>/n): 11.5. Elastic Compliance s33E (x 10<sup>-12</sup> m<sup>2</sup>/n): 15. Property data at 25°C. Information supplied by Piezo Kinetics, Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Piezo-Kinetics-402-Lead-Zirconate-Titanate-Piezoelectric.php](http://www.lookpolymers.com/polymer_Piezo-Kinetics-402-Lead-Zirconate-Titanate-Piezoelectric.php)

Physical Properties	Metric	English	Comments
Density	7.60 g/cc	0.275 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Modulus of Elasticity	76.0 GPa	11000 ksi	
Poissons Ratio	0.31	0.31	
Shear Modulus	29.0 GPa	4210 ksi	calculated

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	150 °C	302 °F	Maximum Operating Temperature

Electrical Properties	Metric	English	Comments
Curie Temperature	350 °C	662 °F	
Dielectric Constant	1250	1250	
	@Frequency 1000 Hz	@Frequency 1000 Hz	
Dissipation Factor	0.0050	0.0050	
	@Frequency 1000 Hz	@Frequency 1000 Hz	
Piezoelectric Longitudinal Coupling Factor, k33	0.67	0.67	
Piezoelectric Transverse Voltage Coefficient, d31, 10 <sup>-12</sup> m/V	-120	-120	
Piezoelectric Shear Charge Coefficient, d15, 10 <sup>-12</sup> m/V	480	480	
Piezoelectric Longitudinal Voltage Coefficient, g33, 10 <sup>-3</sup> V-m/N	24.9	24.9	
Piezoelectric Planar Coupling Factor, kp	0.52	0.52	

Piezoelectric Mechanical Q Electrical Properties	500 Metric	500 English	Comments
Piezoelectric Shear Coupling Factor, k15	0.68	0.68	
Piezoelectric Longitudinal Charge Coefficient, d33, 10 <sup>-12</sup> m/V	275	275	
Piezoelectric Transverse Voltage Coefficient, g31, 10 <sup>-3</sup> V-m/N	-10.8	-10.8	
Piezoelectric Shear Voltage Coefficient, g15, 10 <sup>-3</sup> V-m/N	43.4	43.4	
Piezoelectric Transverse Coupling Factor, k31	0.33	0.33	

## Contact Songhan Plastic Technology Co.,Ltd.

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