Crystal Standard Shapes and Tolerances

Single crystal PMN-PT offers advantages in that it has high coupling and high piezoelectric performance. The following sheet shows the range of shapes and sizes available.

| Disc | | Dimensional | Standard | Fine |
|------|----------------|--|------------|------------|
| | | Range | Tolerances | Tolerances |
| | Diameter (mm) | 5-30 | ±0.127 | ±0.025 |
| | Thickness (mm) | 0.1-12 | ±0.05 | ±0.009 |
| | Metallization | Sputtered Cr/Au (500Å/2000Å) preferred. Others | | |
| | | available on request. | | |
| | Notes | Capability depends on aspect ratio. Size range, | | |
| | | tolerances, and metallization tailored on request. | | |

| Rod | | Dimensional | Standard | Fine |
|------------|----------------|--|------------|------------|
| | | Range | Tolerances | Tolerances |
| | Diameter (mm) | 5-30 | ±0.127 | ±0.025 |
| | Thickness (mm) | 0.1-12 | ±0.05 | ±0.009 |
| | Metallization | Sputtered Cr/Au (500Å/2000Å) preferred. Others available on request. | | |
| | | | | |
| | Notes | Capability depends on aspect ratio. Size range, | | |
| \bigcirc | | tolerances, and metallization tailored on request. | | |

| Plate | | Dimensional | Standard | Fine |
|-------|----------------|--|------------|------------|
| | | Range | Tolerances | Tolerances |
| | Length (mm) | 0.25-70 | ±0.127 | ±0.025 |
| | Width (mm) | 0.25-30 | ±0.127 | ±0.025 |
| | Thickness (mm) | 0.1-20 | ±0.05 | ±0.009 |
| | Metallization | Sputtered Cr/Au (500Å/2000Å) preferred. Others | | |
| | | available on request. | | |
| | Notes | Capability depends on aspect ratio. Size range, | | |
| | | tolerances, and metallization tailored on request. | | |
| | | Largest square is 30x30mm. Plates of 70x12 mm size | | |
| | | are possible. | | |

| Rod | | Dimensional | Standard | Fine |
|-----|----------------|--|------------|------------|
| | | Range | Tolerances | Tolerances |
| | Length (mm) | 0.25-30 | ±0.127 | ±0.025 |
| | Width (mm) | 0.25-30 | ±0.127 | ±0.025 |
| | Thickness (mm) | 0.1-12 | ±0.05 | ±0.009 |
| | Metallization | Sputtered Cr/Au (500Å/2000Å) preferred. Others available on request. Capability depends on aspect ratio. Size range, | | |
| | | | | |
| | Notes | | | |

| tolerances, and metallization tailored on request. |
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| Rings | | Dimensional | Standard | Fine |
|------------|---|--|------------|------------|
| | | Range | Tolerances | Tolerances |
| \bigcirc | Outer diameter (mm) | 10-30 | ±0.127 | ±0.0127 |
| | Inner diameter (mm) | 5 min. | ±0.127 | ±0.025 |
| | Thickness (mm) | 0.5-12 | ±0.05 | ±0.009 |
| | Metallization | Sputtered Cr/Au (500Å/2000Å) preferred. Others | | |
| | | available on request. Electrodes on top and bottom | | |
| | | faces only. | | |
| | Notes | Capability depends on aspect ratio. Size range, | | |
| | tolerances, and metallization tailored on reque | | | n request. |