

Bulk Piezo Components

Bulk Piezoceramic Plates

Features

- General purpose PZT material
- Operation temperature up to 150°C
- Highly customizable

Applications

- Medical ultrasound imaging
- Haptic feedback
- Non-destructive testing of welded structures
- Active vibration control



Description

CTS bulk piezo components are durable, high-quality products, well-suited for a range of demanding sensor, actuator and transducer applications. CTS piezoceramic plates are very versatile and can be customized to fit your application and meet your specification requirements.

Standard Product, Add-Ons or Custom Solutions

Most of CTS' products are custom designed for specific applications with unique requirements. Our capabilities for bulk piezoceramic plates include:

- Length and width from 0.4mm x 1.5mm to 170mm x 89mm or 150mm x 100mm
- Thickness from 0.076mm (HD materials) or 0.2mm (standard materials) to 25mm
- A wide range of piezoceramic materials and electrodes

Technical Specifications

Product Number		KSN300072A	KSN300078A	KSN300079A	KSN300080A	KSN300081A	KSN300082A
Product Reference		Plate-3195HD-L25-W5-TH0.5	Plate-3195HD-L25-W5-TH0.25	Plate-3195HD-L38.5-W7.5-TH0.25	Plate-3195HD-L38.5-W7.5-TH0.5	Plate-3195HD-L50-W10-TH0.5	Plate-3195HD-L77-W15-TH0.5
Property	Units						
Length (L)	mm	25 +/-0.2	25 +/-0.2	38.5 +/-0.2	38.5 +/-0.2	50 +/-0.3	77 +/-0.4
Width (W)	mm	5 +/-0.2	5 +/-0.2	7.5 +/-0.2	7.5 +/-0.2	10 +/-0.2	15 +/-0.2
Thickness (Th)	mm	0.5 +/-0.01	0.25 +/-0.01	0.25 +/-0.01	0.5 +/-0.01	0.5 +/-0.01	0.5 +/-0.01
Free Capacitance (C_p)	nF	3.57~4.37	7.15~8.74	16.86~20.6	8.42~10.3	14.71~17.89	34.33~41.96
Typical Thickness Resonant Frequency (f_r)	MHz	4.22	8.44	8.44	4.22	4.22	4.22
PZT Material	-	3195HD	3195HD	3195HD	3195HD	3195HD	3195HD
Electrode Material	-	Gold	Gold	Gold	Gold	Gold	Gold
Electrode Configuration	-	Wrap-Around	Wrap-Around	Wrap-Around	Wrap-Around	Wrap-Around	Wrap-Around

For material data, please visit www.ctscorp.com/Piezoelectric-Material-Properties

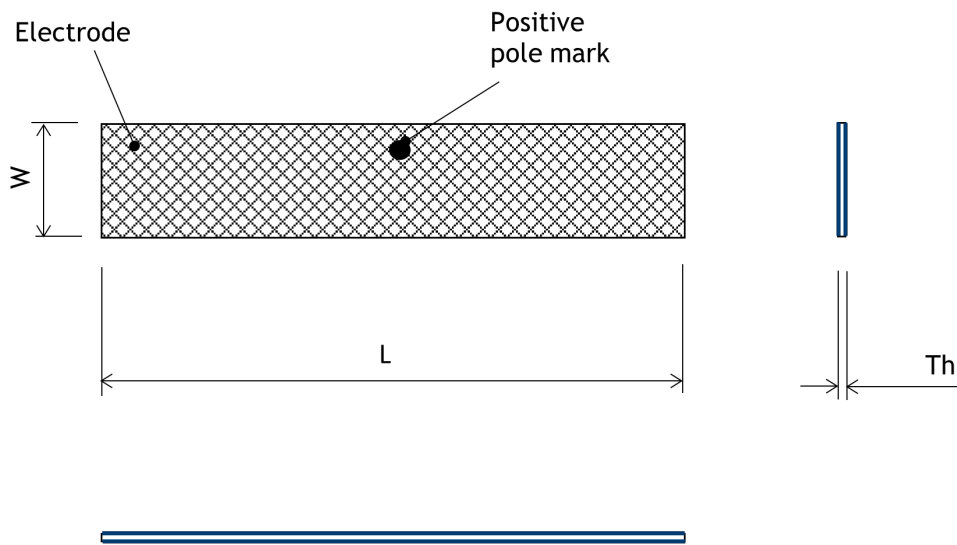
Technical Specifications

Product Number		KSN300083A	KSN300084A	KSN300085A	KSN300086A	KSN300087A
Product Reference		Plate-3203HD- L38.5-W7.5- TH0.125	Plate-3203HD- L50-W10- TH0.125	Plate-3203HD- L38.5-W7.5- TH0.25	Plate-3203HD- L50-W10-TH0.25	Plate-3203HD- L77-W15-TH1
Property	Units					
Length (L)	mm	38.5 +/-0.2	50 +/-0.3	38.5 +/-0.2	50 +/-0.3	77 +/-0.4
Width (W)	mm	7.5 +/-0.2	10 +/-0.2	7.5 +/-0.2	10 +/-0.2	15 +/-0.2
Thickness (Th)	mm	0.125 +/-0.01	0.125 +/-0.01	0.25 +/-0.01	0.25 +/-0.01	1 +/-0.01
Free Capacitance (C_p)	nF	67.34~82.41	117.76~143.93	33.71~41.21	58.88~71.97	34.34~41.97
Typical Thickness Resonant Frequency (f_r)	MHz	16	16	8	8	2
PZT Material	-	3203HD	3203HD	3203HD	3203HD	3203HD
Electrode Material	-	Gold	Gold	Gold	Gold	Nickel-Vanadium
Electrode Configuration	-	Plain	Plain	Plain	Plain	Plain

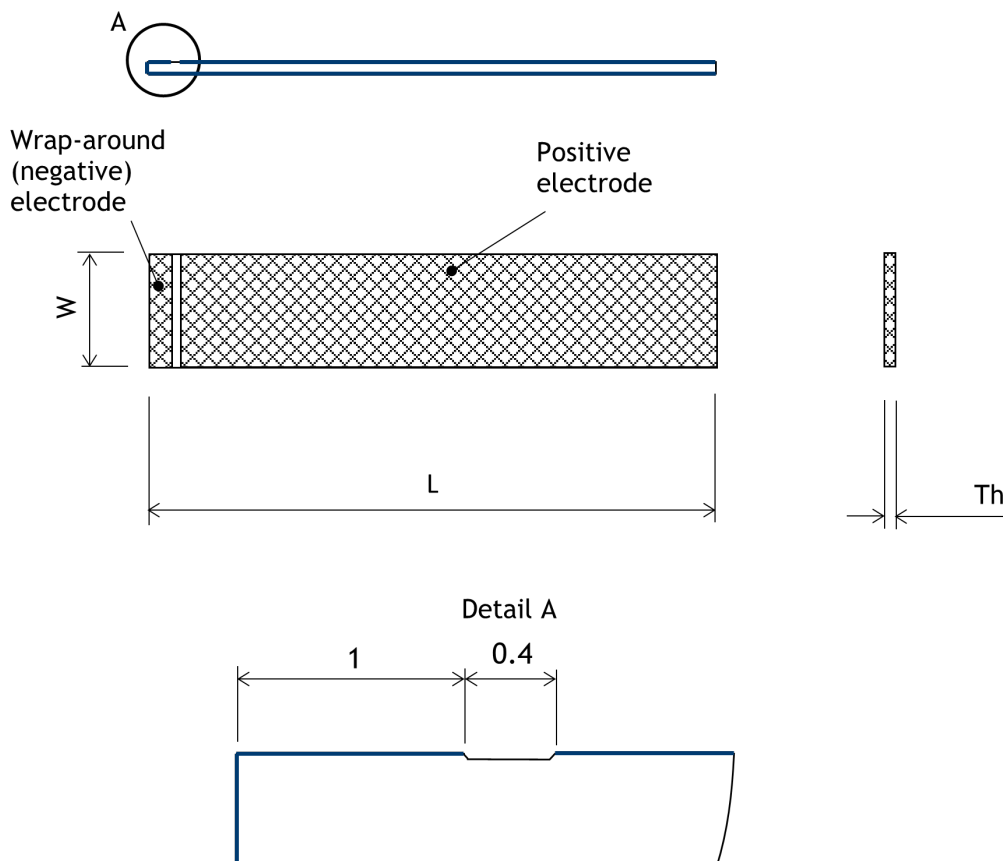
For material data, please visit www.ctscorp.com/Piezoelectric-Material-Properties

Technical Drawings

Plain Electrode Configuration



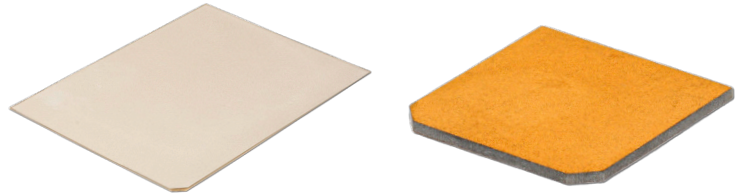
Wrap-Around Electrode Configuration



Product Family

Bulk Piezoceramic Components

- Plates
- Shear Plates



- Rings
- Discs
- Tubes



- Bowls
- Hemispheres



- Composites

