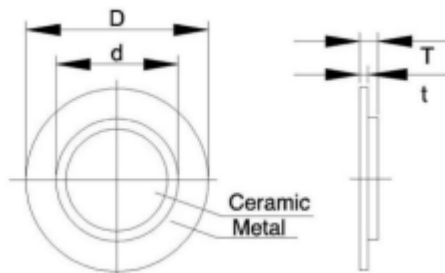
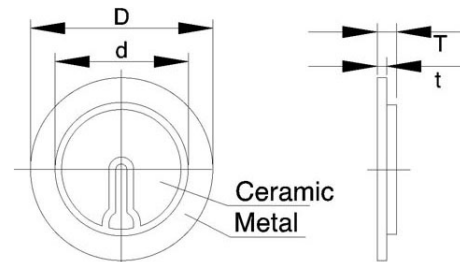




Piezoceramics Sound Elements



External Drive Element



Self Drive Element

- clear sound
- high sound pressure
- low power consumption
- small and lightweight
- 6.5 mm to 50 mm diameter
- single PZT layer or two PZT layers
- low cost

Typical Applications

- household appliance alarms and warning signals
- watch alarms
- smoke detectors
- keyboards / push-button devices
- buzzers and speakers
- toys / games

Part Number	Dimensions (mm)				Characteristics			Metal Disk
	D	d	t	T	Fr (kHz)	R (Ω)	Co (nF)	
Stb1E6.5T-70E	6.5	5.0	0.05	0.11	7.0	2500	7.0	Brass
Stb1E9G-95E	9.0	7.0	0.05	0.11	9.5	1200	10.0	Steel
Stb1E9T-86E	9.0	7.0	0.05	0.11	8.6	1200	10.0	Brass
Stb1E11G-100E	11.0	8.0	0.10	0.17	10.0	400	14.0	Steel
Stb1E12T-50E	12.0	9.0	0.05	0.11	5.0	600	16.0	Brass
Stb1E12T-76E	12.0	9.0	0.10	0.19	7.6	300	11.0	Brass
Stb 1E12T-87E	12.0	9.0	0.10	0.22	8.7	600	10.0	Brass
Stb 1E12T-135E	12.0	9.0	0.15	0.31	13.5	500	7.5	Brass
Stb 1E13T-43E	13.0	9.0	0.05	0.11	4.3	1000	16.0	Brass
Stb 1E14T-100E	14.0	9.0	0.20	0.41	10.0	1000	5.0	Brass
Stb 1E15G-48E	15.0	9.0	0.10	0.21	4.8	800	10.0	Steel
Stb 1E15T-50E	15.0	9.0	0.10	0.22	5.0	1500	11.0	Brass
Stb 1E15T-60E	15.0	11.0	0.10	0.21	6.0	1000	14.0	Brass
Stb 1E15T-86E	15.0	10.0	0.15	0.31	8.6	500	9.5	Brass
Stb 1E15G-100E	15.0	11.0	0.20	0.36	10.0	500	9.5	Steel
Stb 1E15T-116E	15.0	11.0	0.20	0.44	11.6	500	7.0	Brass
Stb 1E18T-36E	18.0	11.0	0.10	0.22	3.6	1500	14.0	Brass
Stb 1E18T-86E	18.0	15.0	0.20	0.41	8.6	500	15.0	Brass
Stb 1E20T-20E	20.0	15.0	0.05	0.22	2.0	500	50.0	Brass
Stb 1E20T-33E	20.0	15.0	0.10	0.19	3.3	400	35.0	Brass
Stb 1E20G-41E	20.0	13.5	0.10	0.22	4.1	500	21.0	Steel
Stb 1E20G-78E	20.0	15.0	0.20	0.44	7.8	200	14.0	Steel
Stb 1E20T-62E	20.0	15.0	0.25	0.41	6.2	200	18.0	Brass
Stb 1E20T-68E	20.0	15.0	0.20	0.44	6.8	250	14.0	Brass
Stb 1E21T-30E	21.0	15.0	0.10	0.21	3.0	400	35.0	Brass
Stb 1E21T-41E	21.0	15.0	0.20	0.32	4.1	300	26.0	Brass
Stb 1E23G-27E	23.0	15.0	0.10	0.21	2.7	500	26.0	Steel
Stb 1E25T-27E	25.0	18.0	0.10	0.22	2.7	250	38.0	Brass



Part Number	Dimensions (mm)				Characteristics			Metal Disk
	D	d	t	T	Fr (kHz)	R (Ω)	Co (nF)	
Stb 1E25T-48E	25.0	20.0	0.20	0.44	4.8	200	25.0	Brass
Stb 1E27T-20E	27.0	20.0	0.10	0.20	2.0	300	65.0	Brass
Stb 1E27T-30E	27.0	20.0	0.20	0.36	3.0	200	36.0	Brass
Stb 1E27T-44E	27.0	20.0	0.25	0.51	4.4	200	21.0	Brass
Stb 1E27G-25E	27.0	20.0	0.10	0.22	2.5	200	50.0	Steel
Stb 1E27G-40E	27.0	20.0	0.20	0.41	4.0	200	27.0	Steel
Stb 1E31T-13E	31.0	18.0	0.10	0.22	1.3	800	45.0	Brass
Stb 1E31T-28E	31.0	20.0	0.20	0.46	2.8	500	24.0	Brass
Stb 1E31G-20E	31.0	20.0	0.10	0.22	2.0	400	50.0	Steel
Stb 1E31G-30E	31.0	20.0	0.20	0.44	3.0	300	25.0	Steel
Stb 1E32T-16E	32.0	20.0	0.10	0.22	1.6	800	60.0	Brass
Stb 1E35T-16E	35.0	25.0	0.10	0.22	1.6	200	80.0	Brass
Stb 1E35T-26E	35.0	25.0	0.25	0.49	2.6	250	42.0	Brass
Stb 1E35T-30E	35.0	25.0	0.40	0.56	3.0	200	37.0	Brass
Stb 1E35G-23E	35.0	25.0	0.20	0.36	2.3	200	55.0	Steel
Stb 1E35G-29E	35.0	25.0	0.25	0.48	2.9	200	30.0	Steel
Stb 1E40T-16E	40.0	25.0	0.20	0.32	1.6	400	80.0	Brass
Stb 1E40G-20E	40.0	25.0	0.20	0.41	2.0	300	42.0	Steel
Stb 1E41T-10E	41.0	25.0	0.10	0.22	1.0	1000	80.0	Brass
Stb 1E41T-22E	41.0	25.0	0.40	0.64	2.2	300	42.0	Brass
Stb 1E41T-45E	41.0	25.0	0.20	0.44	4.5	250	40.0	Brass
Stb 1E41G-15E	41.0	25.0	0.10	0.22	1.5	300	80.0	Steel
Stb 1E43G-23E	43.0	20.0	0.10	0.22	2.3	200	48.0	Steel
Stb 1E47T-26E	47.0	25.0	0.10	0.22	2.6	200	80.0	Brass
Stb 1E50T-08E	50.0	25.0	0.20	0.41	0.8	1000	45.0	Brass
Stb 1E50T-22E	50.0	25.0	0.15	0.27	2.2	300	80	Brass
Stb 1E50T-31E	50.0	25.0	0.20	0.44	3.1	300	42.0	Brass

Insulation resistance R_{is} : >100 M Ω
 Max. operating voltage U_{max} : 30 V_{p-p}

Terminals:

On request the transducer membranes can be supplied with terminals.
 Wire AWG 28 or AWG 30