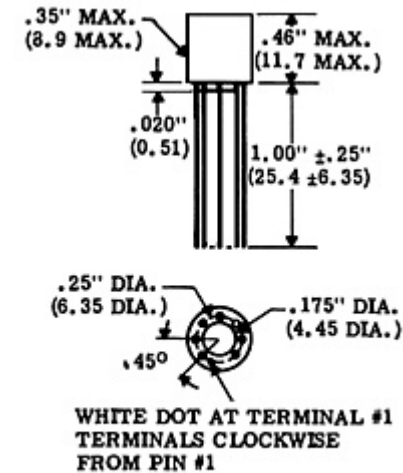


Ultra Miniature Transformers

Y Series Thru Hole

Specifications

- **MIL-PRF-27:** All units manufactured to MIL-PRF-27, Grade 5 Class S.
- **FREQUENCY RESPONSE:** $\pm 3\text{db}$, 300 Hz - 100 KHz at 1.0 Milliwatt.
- **MAXIMUM DISTORTION:** 5% With Rated Power Level at 1 KHz and 400 Hz and 300 Hz.
- **DIELECTRIC STRENGTH:** All Units Tested at 200 V RMS.
- **INSULATION RESISTANCE:** Greater Than 10,000 Megohms at 300 V DC.
- **WEIGHT:** 3 Grams.
- **OPERATING TEMPERATURE:** -55°C to $+130^{\circ}\text{C}$
- **TERMINALS:** Solid .016 Diameter Conductor. Meet solderability per MIL-STD-202 Method 208.
- **THERMAL SHOCK:** 25 Cycles, Method 107, MIL-STD-202, Test Condition -55°C to $+130^{\circ}\text{C}$



DIMENSIONS ARE IN INCHES (MM)

[Larger size drawing of Y Series](#)

Ultra Miniature Transformers: Y Series													
Pico Part Number	Prim. Imped. Ohms	Sec. Imped. Ohms Split Windings		Power Watts			Prim. Unbal. DC Curr. ma	Prim. DC Resist. Ohms	Sec. DC Resist. Ohms		Turns Ratio Prim/Sec.		Prices 1-9 *** (US \$)
		SER	PAR	1 KHz and higher	400 Hz and higher	300 Hz and higher			Ser Conn	Par Conn	Sec Ser Conn	Sec Par Conn	

Y-27003	10ct	10ct	2.5	.6	.2	.1	31.6	1	1.25	.32	1:1	2:1	65.96
Y-27005	20ct	8ct	2	.6	.2	.1	22.3	2	.9	.23	1.58:1	3.16:1	65.96
Y-27010	20ct	20ct	5	.6	.2	.1	22.3	2.7	2.25	.56	1:1	2:1	65.96
Y-27015	32ct	32ct	8	.6	.2	.1	17.6	3.4	4	1	1:1	2:1	65.96
Y-27020	40ct	40ct	10	.6	.2	.1	15.8	4.2	4.5	1.13	1:1	2:1	65.96
Y-27025	48ct	16ct	4	.6	.2	.1	14.4	5	1.8	.45	1.73:1	3.46:1	65.96
Y-27030	50ct	50ct	12.5	.6	.2	.1	14.1	5.25	5.6	1.4	1:1	2:1	65.96
Y-27035	80ct	32ct	8	.6	.2	.1	11.1	8.4	4	1	1.58:1	3.16:1	85.81
Y-27040	100ct	40ct	10	.6	.2	.1	10	10	4.5	1.13	1.58:1	3.16:1	85.81
Y-27045	100ct	100ct	25	.6	.2	.1	10	11	11.25	2.8	1:1	2:1	85.81

Ultra Miniature Transformers: Y Series													
Pico Part Number	Prim. Imped. Ohms	Sec. Imped. Ohms Split Windings		Power Watts			Prim. Unbal. DC Curr. ma	Prim. DC Resist. Ohms	Sec. DC Resist. Ohms		Turns Ratio Prim/Sec.		Prices 1-9 *** (US \$)
		SER	PAR	1 KHz and higher	400 Hz and higher	300 Hz and higher			Ser Conn	Par Conn	Sec Ser Conn	Sec Par Conn	
Y-27050	120ct	12.8ct	3.2	.6	.2	.1	9.1	14.4	1.8	.45	3.06:1	6.12:1	62.17
Y-27055	120ct	60ct	15	.6	.2	.1	9.1	14.4	8.4	2.1	1.41:1	2.83:1	82.14
Y-27060	120ct	120ct	30	.6	.2	.1	9.1	14.4	16.8	4.2	1:1	2:1	82.14
Y-27065	150ct	12ct	3	.6	.2	.1	8.2	15	1.5	.38	3.54:1	7.08:1	62.17
Y-27070	150ct	50ct	12.5	.6	.2	.1	8.2	15	6	1.5	1.73:1	3.46:1	96.12
Y-27075	150ct	100ct	25	.6	.2	.1	8.2	15	12	3	1.22:1	2.45:1	69.12
Y-27080	150ct	150ct	37.5	.6	.2	.1	8.2	15	18	4.5	1:1	2:1	81.57
Y-27085	150ct	600ct	150	.6	.2	.1	8.2	15	72	18	1:2	1:1	69.12
Y-27090	200ct	200ct	50	.6	.2	.1	7	22	24	6	1:1	2:1	69.12
Y-27095	300ct	12ct	3	.6	.2	.1	5.8	30	1.4	.35	5:1	10:1	62.17
Y-27100	300ct	50ct	12.5	.6	.2	.1	5.8	30	6	1.5	2.45:1	4.9:1	69.12
Y-27105	300ct	150ct	37.5	.6	.2	.1	5.8	30	18	4.5	1.41:1	2.83:1	69.12
Y-27110	300ct	300ct	75	.6	.2	.1	5.8	30	36	9	1:1	2:1	82.14
Y-27115	300ct	600ct	150	.6	.2	.1	5.8	30	72	18	1:1.41	1.41:1	65.24
Y-27120	320ct	12.8ct	3.2	.6	.2	.1	5.6	36	1.8	.45	5:1	10:1	62.17
Y-27125	400ct	40ct	10	.6	.2	.1	5	40	4.8	1.2	3.16:1	6.32:1	82.14
Y-27130	400ct	120ct	30	.6	.2	.1	5	40	14.5	3.6	1.83:1	3.65:1	82.14
Y-27135	400ct	200ct	50	.6	.2	.1	5	40	24	6	1.41:1	2.83:1	69.12
Y-27140	400ct	400ct	100	.6	.2	.1	5	40	48	12	1:1	2:1	82.14
Y-27145	400ct	1000ct	250	.6	.2	.1	5	40	125	31	1:1.58	1.26:1	94.21

Y-27150	400ct	2000ct	500	.6	.2	.1	5	40	240	60	1:2.24	1:1.12	94.21
Y-27155	400ct	4000ct	1000	.6	.2	.1	5	40	480	120	1:3.16	1:1.58	85.09
Y-27160	500ct	12.8ct	3.2	.6	.2	.1	4.5	50	1.5	.38	6.25:1	12.5:1	73.10
Y-27165	500ct	16ct	4	.6	.2	.1	4.5	50	1.9	.48	5.6:1	11.2:1	73.10
Y-27170	500ct	50ct	12.5	.6	.2	.1	4.5	50	6	1.5	3.16:1	6.32:1	73.10
Y-27175	500ct	150ct	37.5	.6	.2	.1	4.5	50	18	4.5	1.83:1	3.65:1	73.10
Y-27180	500ct	500ct	125	.6	.2	.1	4.5	50	60	15	1:1	2:1	73.10
Y-27185	*500ct	500ct	-	.6	.2	.1	4.5	50	60	-	1:1	-	73.10
Y-27190	500ct	600ct	150	.6	.2	.1	4.5	50	72	18	1:1.1	1.83:1	65.24
Y-27195	600ct	12.8ct	3.2	.6	.2	.1	4.1	60	1.5	.38	6.85:1	13.7:1	58.72
Y-27200	600ct	30ct	7.5	.6	.2	.1	4.1	60	3.6	.9	4.47:1	8.94:1	65.24
Y-27205	600ct	48ct	12	.6	.2	.1	4.1	60	5.8	1.45	3.54:1	7.07:1	65.24
Y-27210	600ct	200ct	50	.6	.2	.1	4.1	60	24	6	1.73:1	3.46:1	65.24
Y-27215**	600ct	600ct	150	.6	.2	.1	4.1	60	72	18	1:1	2:1	65.24
Y-27220**	*600ct	600ct	-	.6	.2	.1	4.1	60	72	-	1:1	-	65.24
Y-27225**	600ct	1200ct	300	.6	.2	.1	4.1	60	144	36	1:1.41	1.41:1	65.24
Y-27230	640ct	12.8ct	3.2	.6	.2	.1	3.9	64	1.5	.38	7.07:1	14.14:1	65.24
Y-27235	700ct	100ct	25	.6	.2	.1	3.8	70	12	3	2.65:1	5.29:1	65.24
Y-27240	800ct	12.8ct	3.2	.6	.2	.1	3.5	80	1.5	.38	7.9:1	15.8:1	65.24
Y-27245	800ct	48ct	12	.6	.2	.1	3.5	80	5.8	1.45	4.08:1	8.16:1	73.10
Y-27250	800ct	800ct	200	.6	.2	.1	3.5	80	96	24	1:1	2:1	73.10
Y-27255	900ct	600ct	150	.6	.2	.1	3.3	90	72	18	1.22:1	2.45:1	65.24
Y-27260	1000ct	12ct	3	.6	.2	.1	3.2	100	1.4	.35	9.13:1	18.3:1	65.24
Y-27265	1000ct	50ct	12.5	.6	.2	.1	3.2	100	6	1.5	4.47:1	8.94:1	73.10
Y-27270	1000ct	1000ct	250	.6	.2	.1	3.2	100	120	30	1:1	2:1	73.10

Ultra Miniature Transformers: Y Series

Pico Part Number	Prim. Imped. Ohms	Sec. Imped. Ohms Split Windings		Power Watts			Prim. Unbal. DC Curr. ma	Prim. DC Resist. Ohms	Sec. DC Resist. Ohms		Turns Ratio Prim/Sec.		Prices 1-9 *** (US \$)
		SER	PAR	1 KHz and higher	400 Hz and higher	300 Hz and higher			Ser Conn	Par Conn	Sec Ser Conn	Sec Par Conn	
Y-27275	1060ct	12.8ct	3.2	.6	.2	.1	3.1	106	1.5	.38	9.1:1	18.2:1	65.24
Y-27280	1200ct	12.8ct	3.2	.6	.2	.1	2.9	120	1.5	.38	9.68:1	19.4:1	58.72
Y-27285	1200ct	500ct	125	.6	.2	.1	2.9	120	60	15	1.55:1	3.1:1	58.72
Y-27290	1200ct	1200ct	300	.6	.2	.1	2.9	120	144	36	1:1	2:1	58.72
Y-27295	*1200ct	1200ct	-	.6	.2	.1	2.9	120	144	-	1:1	-	65.24

Y-27300	1500ct	12ct	3	.6	.2	.1	2.6	150	1.44	.36	11.2:1	22.4:1	65.24
Y-27305	1500ct	500ct	125	.6	.2	.1	2.6	150	60	15	1.73:1	3.46:1	73.10
Y-27310	*1500ct	600ct	-	.6	.2	.1	2.6	150	72	-	1.58:1	-	94.21
Y-27315	*1500ct	1500ct	-	.6	.2	.1	2.6	150	180	-	1:1	-	73.10
Y-27320	1600ct	12.8ct	3.2	.6	.2	.1	2.5	160	1.5	.38	11.2:1	22.4:1	65.24
Y-27325	2000ct	8ct	2	.6	.2	.1	2.2	200	.96	.24	15.8:1	31.6:1	73.10
Y-27330	2000ct	2000ct	500	.6	.2	.1	2.2	200	240	60	1:1	2:1	85.09
Y-27335	*2000ct	2000ct	-	.6	.2	.1	2.2	200	240	-	1:1	-	94.21
Y-27340	2000ct	8000ct	2000	.6	.2	.1	2.2	200	960	240	1:2	1:1	85.09
Y-27345	2500ct	2500ct	625	.6	.2	.1	2	250	300	75	1:1	2:1	85.09
Y-27350	3000ct	3000ct	725	.6	.2	.1	1.8	300	360	90	1:1	2:1	100.35
Y-27355	*3000ct	3000ct	-	.6	.2	.1	1.8	300	360	-	1:1	-	94.21
Y-27360	3600ct	3600ct	900	.6	.2	.1	1.7	360	432	108	1:1	2:1	85.09
Y-27365	4000ct	16ct	4	.6	.2	.1	1.6	400	1.92	.48	15.8:1	31.6:1	85.09
Y-27370**	4000ct	600ct	150	.6	.2	.1	1.6	400	72	18	2.58:1	5.16:1	85.09
Y-27375	4000ct	1000ct	250	.6	.2	.1	1.6	400	120	30	2:1	4:1	85.09
Y-27380	*4000ct	8000ct	-	.6	.2	.1	1.6	400	960	-	1:1.41	-	85.09
Y-27385	5000ct	500ct	125	.5	.2	.1	1.4	500	60	15	3.16:1	6.32:1	68.41
Y-27390	5000ct	5000ct	1250	.5	.2	.1	1.4	500	600	150	1:1	2:1	68.41
Y-27395	7500ct	50ct	12.5	.33	.2	.1	1.2	750	6	1.5	12.2:1	24.5:1	68.41
Y-27400	7500ct	100ct	25	.33	.2	.1	1.2	750	12	3	8.66:1	17.3:1	72.41
Y-27405	7500ct	600ct	150	.33	.2	.1	1.2	750	72	18	3.54:1	7.07:1	80.31
Y-27410	7500ct	2500ct	625	.33	.2	.1	1.2	750	300	75	1.73:1	3.46:1	80.31
Y-27415	*7500ct	7500ct	-	.33	.2	.1	1.2	750	900	-	1:1	-	94.21
Y-27420	8000ct	12.8ct	3.2	.3	.2	.1	1.1	800	1.5	.38	25:1	50:1	68.41
Y-27425	8000ct	1000ct	250	.3	.2	.1	1.1	800	120	30	2.83:1	5.66:1	68.41
Y-27430	*8000ct	1200ct	-	.3	.2	.1	1.1	800	144	-	2.58:1	-	85.09
Y-27435	*9000ct	9000ct	-	.27	.2	.1	1.1	900	1080	-	1:1	-	88.47
Y-27440	10,000ct	12.8ct	3.2	.25	.2	.1	1.0	1000	1.5	.38	28:1	56:1	65.24
Y-27445	10,000ct	16ct	4	.25	.2	.1	1.0	1000	1.92	.48	25:1	50:1	72.12
Y-27450	10,000ct	100ct	25	.25	.2	.1	1.0	1000	12	3	10:1	20:1	72.12
Y-27455	10,000ct	200ct	50	.25	.2	.1	1.0	1000	24	6	7.07:1	14.14:1	72.12
Y-27460	10,000ct	500ct	125	.25	.2	.1	1.0	1000	60	15	4.47:1	8.94:1	72.12
Y-27465	10,000ct	600ct	150	.25	.2	.1	1.0	1000	72	18	4.08:1	8.16:1	72.12
Y-27470	10,000ct	1000ct	250	.25	.2	.1	1.0	1000	120	30	3.16:1	6.32:1	72.12
Y-27475	10,000ct	1200ct	300	.25	.2	.1	1.0	1000	144	36	2.89:1	5.77:1	72.12
Y-27480	10,000ct	1500ct	375	.25	.2	.1	1.0	1000	180	45	2.58:1	5.16:1	78.60
Y-27485	10,000ct	2000ct	500	.25	.2	.1	1.0	1000	240	60	2.24:1	4.47:1	78.60
Y-27490	10,000ct	5000ct	1250	.25	.2	.1	1.0	1000	600	150	1.41:1	2.83:1	84.12
Y-27495	10,000ct	7500ct	1875	.25	.2	.1	1.0	1000	900	225	1.15:1	2.3:1	84.12
Y-27500	10,000ct	10,000ct	2500	.25	.2	.1	1.0	1000	1200	300	1:1	2:1	82.14
Y-27505	*10,000ct	10,000ct	-	.25	.2	.1	1.0	1000	1200	-	1:1	-	91.59

Ultra Miniature Transformers: Y Series

Pico Part Number	Prim. Imped. Ohms	Sec. Imped. Ohms Split Windings		Power Watts			Prim. Unbal. DC Curr. ma	Prim. DC Resist. Ohms	Sec. DC Resist. Ohms		Turns Ratio Prim/Sec.		Prices 1-9 *** (US \$)
		SER	PAR	1 KHz and higher	400 Hz and higher	300 Hz and higher			Ser Conn	Par Conn	Sec Ser Conn	Sec Par Conn	
Y-27510	15,000ct	400ct	100	.16	.16	.1	.82	1500	48	12	6.12:1	12.24:1	82.14
Y-27515	15,000ct	500ct	125	.16	.16	.1	.82	1500	60	15	5.48:1	10.95:1	82.14
Y-27520	15,000ct	600ct	150	.16	.16	.1	.82	1500	72	18	5:1	10:1	82.14
Y-27525	15,000ct	10,000ct	2500	.16	.16	.1	.82	1500	1200	300	1.22:1	2.45:1	91.59
Y-27530	*15,000ct	15,000ct	-	.16	.16	.1	.82	1500	1800	-	1:1	-	80.93
Y-27535	15,000ct	15,000ct	3750	.16	.16	.1	.82	1500	1800	450	1:1	2:1	80.93
Y-27540	16,000ct	1000ct	250	.15	.15	.1	.8	1600	120	30	4:1	8:1	85.09
Y-27545	20,000ct	500ct	125	.125	.125	.1	.7	2000	60	15	6.33:1	12.65:1	82.14
Y-27550	20,000ct	600ct	150	.125	.125	.1	.7	2000	72	18	5.77:1	11.55:1	82.14
Y-27555	20,000ct	800ct	200	.125	.125	.1	.7	2000	96	24	5:1	10:1	65.24
Y-27560	20,000ct	1000ct	250	.125	.125	.1	.7	2000	120	30	4.47:1	8.94:1	82.14
Y-27565	20,000ct	5000ct	1250	.125	.125	.1	.7	2000	600	150	2:1	4:1	82.14
Y-27570	20,000ct	10,000ct	2500	.125	.125	.1	.7	2000	1200	300	1.41:1	2.83:1	82.14
Y-27575	*20,000ct	20,000ct	-	.125	.125	.1	.7	2000	2400	-	1:1	-	82.14
Y-27580	25,000ct	500ct	125	.1	.1	.1	.63	2500	60	15	7.07:1	14.14:1	82.14
Y-27585	25,000ct	1000ct	250	.1	.1	.1	.63	2500	120	30	5:1	10:1	82.14
Y-27590	30,000ct	50ct	12.5	.08	.08	.08	.58	3000	6	1.5	24.5:1	49:1	82.14
Y-27595	30,000ct	1200ct	300	.08	.08	.08	.58	3000	144	36	5:1	10:1	82.14
Y-27600	30,000ct	500ct	125	.08	.08	.08	.58	3000	60	15	7.75:1	15.5:1	82.14
Y-27605	30,000ct	200ct	50	.08	.08	.08	.58	3000	24	6	12.25:1	24.5:1	82.14
Y-27610	30,000ct	5000ct	1250	.08	.08	.08	.58	3000	600	150	2.45:1	4.9:1	91.54
Y-27615	30,000ct	10,000ct	2500	.08	.08	.08	.58	3000	1200	300	1.73:1	3.46:1	91.54
Y-27620	*30,000ct	30,000ct	-	.08	.08	.08	.58	3000	3600	-	1:1	-	91.54
Y-27625	40,000ct	400ct	100	.06	.06	.06	.5	4000	48	12	10:1	20:1	91.54
Y-27630	40,000ct	2000ct	500	.06	.06	.06	.5	4000	240	60	4.47:1	8.94:1	91.54
Y-27635	40,000ct	4000ct	1000	.06	.06	.06	.5	4000	480	120	3.16:1	6.32:1	94.95
Y-27640	40,000ct	20,000ct	5000	.06	.06	.06	.5	4000	2400	600	1.41:1	2.83:1	91.54
Y-27645	*40,000ct	40,000ct	-	.06	.06	.06	.5	4000	4800	-	1:1	-	91.54
Y-27650	50,000ct	200ct	50	.05	.05	.05	.45	5000	24	6	15.8:1	31.6:1	94.95
Y-27655	50,000ct	500ct	125	.05	.05	.05	.45	5000	60	15	10:1	20:1	94.95

Y-27660	50,000ct	600ct	150	.05	.05	.05	.45	5000	72	18	9.13:1	18.26:1	94.95
Y-27665	60,000ct	15,000ct	3750	.04	.04	.04	.41	6000	1800	450	2:1	4:1	94.95
Y-27670	62,500ct	50ct	12.5	.04	.04	.04	.4	6250	6	1.5	35.4:1	70.7:1	94.95
Y-27675	80,000ct	15,000ct	3750	.03	.03	.03	.35	8000	1800	450	2.3:1	4.6:1	95.95
Y-27680	90,000ct	10,000ct	2500	.028	.028	.028	.33	9000	1200	300	3:1	6:1	94.95
Y-27685	95,000ct	15,000ct	3750	.026	.026	.026	.32	9500	1800	450	2.52:1	5.03:1	94.95
Y-27690	100,000ct	60ct	15	.025	.025	.025	.31	10,000	7.2	1.8	40.8:1	81.6:1	105.09
Y-27695	100,000ct	100ct	25	.025	.025	.025	.31	10,000	12	3	31.6:1	63.2:1	105.09
Y-27700	100,000ct	500ct	125	.025	.025	.025	.31	10,000	60	15	14.1:1	28.3:1	105.09
Y-27705	100,000ct	10,000ct	2500	.025	.025	.025	.31	10,000	1200	300	3.16:1	6.32:1	105.09
Y-SHIELD: MU-METAL SHIELD .37" DIA. X .46" HT (9.4 MM DIA. X 11.7 MM HT.) SINGLE SHIELD													11.23
YXX-SHIELD: MU-METAL SHIELD .395" DIA. X .47" HT (10.1 MM DIA. X 11.9 MM HT.) USE WITH Y-SHIELD FOR DOUBLE SHIELDING													11.23

*Includes Electrostatic Shield

**Miniaturized telephone coupling application

***Discount Prices:

• 1-9 Net;

10-24 less 10%;

25-49 less 16%;

50-99 less 23%;

100-499 less 30%

Ordering Instructions:

• No minimum.

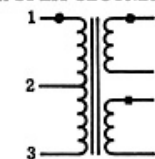
Net 30 days F.O.B. Pelham, NY

Delivery--stock to one week for sample orders.

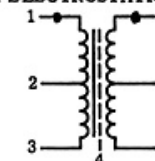
FEATURES

- Extreme resistance to thermal shock
- Ultra miniature size
- PICO is approved QPL Source (Mil-PRF-27)
- Magnetic Shields available
- Electrostatic shielding can be added
- Variation of standard designs available
- Primary and secondary windings can be used either as input or output.
- Special production techniques ensure uniform size and leads which are free of encapsulant. No meniscus in lead area.
- Every unit can be made with a 300 thermal cycle guarantee using PICO's special SR construction. Contact factory for details.

SCHEMATICS FOR TRANSFORMERS
WITH SPLIT SECONDARIES



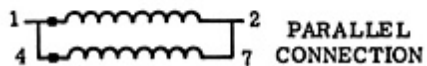
SCHEMATIC FOR TRANSFORMERS
WITH ELECTROSTATIC SHIELD



INDUCTORS

PART NUMBERS	INDUCTANCE SERIES	DC CURRENT ma	DC RESISTANCE OHMS	PRICE 1-9*** (US \$)
Y-27750	SERIES .075 .06 PARALLEL .018 .015	10 30 20 60	10.5 2.6	62.22
Y-27760	SERIES .3 .15 PARALLEL .075 .04	4 20 8 40	25 6.2	69.17
Y-27770	SERIES 3.5 1.0 PARALLEL 0.9 .25	2 5 4 10	560 140	69.17
Y-27780	SERIES 6.0 1.5 PARALLEL 1.5 .38	2 5 4 10	2100 525	69.17
Y-27790	SERIES 20 8 PARALLEL 5 2	1 3 2 6	5100 1275	85.09

SCHEMATIC FOR INDUCTORS



Inductors: All inductors have split windings and measurements are listed for both series and parallel connections. Two values of inductance, each at a particular value of DC Current, are listed for each inductor.

Delivery - stock to one week for sample orders.

For immediate engineering assistance or to place an order:

Call Toll Free: 800-431-1064

PICO Electronics, Inc.

143 Sparks Ave. Pelham, NY 10803-1810

Tel: 914-738-1400 or Fax: 914-738-8225

[Go back to Thru Hole Transformers and Inductors menu](#)