

Audio Transformers:

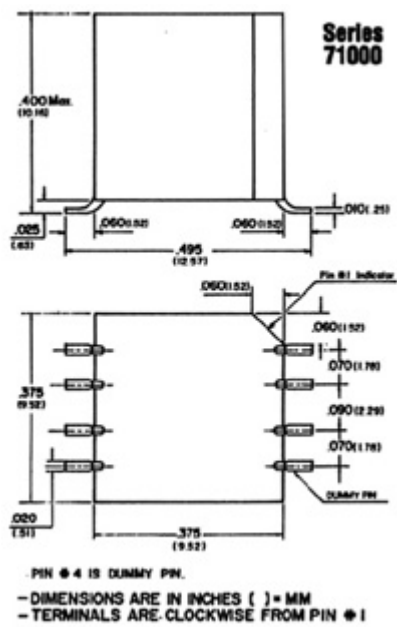
2 Ohm to 40K Ohm; 400Hz to 100KHz; 400 milliwatt at 1KHz

SURFACE MOUNT

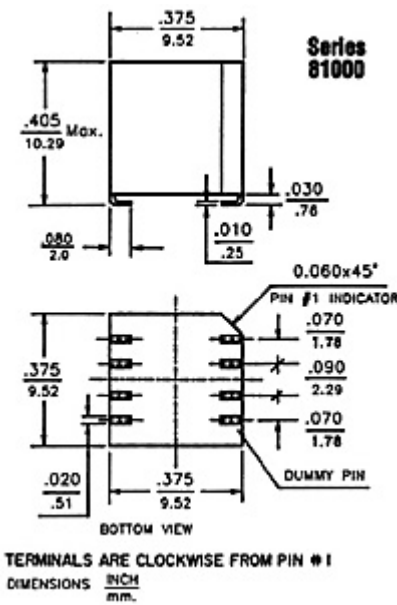
PICO surface mount units utilize materials and methods to withstand extreme temperatures of vapor phase, I.R., and other reflow procedures without degradation of electrical or mechanical characteristics.

Specifications

- **MIL-PRF-27:** All units manufactured to MIL-PRF-27, Grade 5, Class S.
- **FREQUENCY RESPONSE:** $\pm 3\text{db}$, 400 Hz-100 KHz at 1.0 Milliwatt.
- **MAXIMUM DISTORTION:** 5% with rated power level at 1 KHz and 400 Hz.
- **DIELECTRIC STRENGTH:** All units tested at 200 V RMS.
- **INSULATION RESISTANCE:** Greater than 10,000 Megohms at 300 V DC.
- **WEIGHT:** 3 Grams
- **TERMINALS:** Solderability per MIL-STD-202, Method 208.
- **THERMAL SHOCK:** 25 Cycles, Method 107, MIL-STD-202, Test Condition -55°C to $+130^{\circ}\text{C}$.
- **MOISTURE SENSITIVITY LEVEL:** MSL3



Bottom View
[Larger size schematic](#) [1]



Bottom View
[Larger size schematic](#) [2]

Audio Transformers: 2 Ohm to 40K Ohm; 400Hz to 100KHz; 400 milliwatt at 1KHz

Gull Wing PICO Part Number	J Lead PICO Part Number	Primary Imped Ohms	Secondary Impedence Ohms Split Windings		Power Watts		Primary Unbal DC Current ma	Prim DC Resist Ohms	Secondary DC Resistance Ohms		Turns/Ratio Prim/Sec		Pico Prices 1-9** (US \$)
			SER	PAR	1KHz and higher	400Hz and higher			SER CONN	PAR CONN	SEC SER CONN	SEC PAR CONN	
71003	81003	10ct	10ct	2.5	.4	.075	31.6	1.1	1.3	.33	1:1	2:1	61.14
71005	81005	20ct	8ct	2	.4	.075	22.3	2.2	1	.25	1.58:1	3.16:1	61.14
71010	81010	20ct	20ct	5	.4	.075	22.3	2.2	2.6	.65	1:1	2:1	61.14
71015	81015	32ct	32ct	8	.4	.075	17.6	3.5	4.2	1.05	1:1	2:1	61.14
71020	81020	40ct	40ct	10	.4	.075	15.8	4	4.5	1.2	1:1	2:1	61.14

71025	81025	48ct	16ct	4	.4	.075	14.4	5.3	1.9	.48	1.73:1	3.46:1	64.88
71030	81030	50ct	50ct	12.5	.4	.075	14.1	5.6	6.5	1.6	1.1	2:1	64.88
71035	81035	80ct	32ct	8	.4	.075	11.1	8	4	1	1.58:1	3.16:1	77.02
71040	81040	100ct	40ct	10	.4	.075	10	10	4.5	1.2	1.58:1	3.16:1	64.88
71045	81045	100ct	100ct	25	.4	.075	10	10	12	3	1:1	2:1	58.36
Gull Wing PICO Part Number	J Lead PICO Part Number	Primary Imped Ohms	Secondary Impedence Ohms Split Windings		Power Watts		Primary Unbal DC Current ma	Prim DC Resist Ohms	Secondary DC Resistance Ohms		Turns/Ratio Prim/Sec		Pico Prices 1-9** (US \$)
			SER	PAR	1KHz and higher	400Hz and higher			SER CONN	PAR CONN	SEC SER CONN	SEC PAR CONN	
71050	81050	120ct	12.8ct	3.2	.4	.075	9.1	12	1.5	.38	3.06:1	6.12:1	58.36
71055	81055	120ct	60ct	15	.4	.075	9.1	12	7.2	1.8	1.41:1	2.83:1	77.02
71060	81060	120ct	120ct	30	.4	.075	9.1	12	14.5	3.6	1:1	2:1	77.02
71065	81065	150ct	12ct	3	.4	.075	8.2	15	1.5	.38	3.54:1	7.08:1	58.42
71070	81070	150ct	50ct	12.5	.4	.075	8.2	15	6	1.5	1.73:1	3.46:1	64.88
71075	81075	150ct	100ct	25	.4	.075	8.2	15	12	3	1.22:1	2.45:1	64.88
71080	81080	150ct	150ct	37.5	.4	.075	8.2	15	16.8	4.2	1:1	2:1	77.02
71085	81085	150ct	600ct	150	.4	.075	8.2	15	70	17.5	1:2	1:1	64.88
71090	81090	200ct	200ct	50	.4	.075	7	20	24	6	1:1	2:1	64.88
71095	81095	300ct	12ct	3	.4	.075	5.8	30	1.5	.38	5:1	10:1	58.36
71100	81100	300ct	50ct	12.5	.4	.075	5.8	30	6	1.5	2.45:1	4.9:1	64.88
71105	81105	300ct	150ct	37.5	.4	.075	5.8	30	18	4.5	1.41:1	2.83:1	64.88
71110	81110	300ct	300ct	75	.4	.075	5.8	30	36	9	1:1	2:1	77.02
71115	81115	300ct	600ct	150	.4	.075	5.8	30	72	18	1:1.41	1.41:1	58.36
71120	81120	320ct	12.8ct	3.2	.4	.075	5.6	32	1.5	.38	5:1	10:1	58.36
71125	81125	400ct	40ct	10	.4	.075	5	40	4.5	1.1	3.16:1	6.32:1	77.02
71130	81130	400ct	120ct	30	.4	.075	5	40	14	3.5	1.83:1	3.65:1	77.02
71135	81135	400ct	200ct	50	.4	.075	5	40	24	6	1.41:1	2.83:1	64.88
71140	81140	400ct	400ct	100	.4	.075	5	40	48	12	1:1	2:1	77.02
71145	81145	400ct	1000ct	250	.4	.075	5	40	120	30	1:1.58	1.26:1	88.36
71150	81150	400ct	2000ct	500	.4	.075	5	40	240	60	1:2.24	1:1.12	88.36
71155	81155	400ct	4000ct	1000	.4	.075	5	40	480	120	1:3.16	1:1.58	79.80
71160	81160	500ct	12.8ct	3.2	.4	.075	4.5	50	1.5	.38	6.25:1	12.5:1	67.65
71165	81165	500ct	16ct	4	.4	.075	4.5	50	2	.5	5.6:1	11.2:1	67.65
71170	81170	500ct	50ct	12.5	.4	.075	4.5	50	6	1.5	3.16:1	6.32:1	67.65
71175	81175	500ct	150ct	37.5	.4	.075	4.5	50	16	4.5	1.83:1	3.65:1	67.65
71180	81180	500ct	500ct	125	.4	.075	4.5	50	60	15	1:1	2:1	67.65
71185	81185	*500ct	500ct	-	.4	.075	4.5	50	60	-	1:1	-	67.65
71190	81190	500ct	600ct	150	.4	.075	4.5	50	72	18	1:1.1	1.83:1	67.65
71195	81195	600ct	12.8ct	3.2	.4	.075	4.1	60	1.5	.38	6.85:1	13.7:1	58.36
71200	81200	600ct	30ct	7.5	.4	.075	4.1	60	3.6	.9	4.47:1	8.94:1	61.14
71205	81205	600ct	48ct	12	.4	.075	4.1	60	5.8	1.45	3.54:1	7.07:1	61.14
71210	81210	600ct	200ct	50	.4	.075	4.1	60	24	6	1.73:1	3.46:1	61.14
71215	81215	600ct	600ct	150	.4	.075	4.1	60	72	18	1:1	2:1	61.14
71220	81220	*600ct	600ct	-	.4	.075	4.1	60	72	-	1:1	-	67.65
71225	81225	600ct	1200ct	300	.4	.075	4.1	60	144	36	1:1.41	1.41:1	61.14
71230	81230	640ct	12.8ct	3.2	.4	.075	3.9	64	1.5	.38	7.07:1	14.4:1	61.14
71235	81235	700ct	100ct	25	.4	.075	3.8	70	12	3	2.65:1	5.29:1	61.14
71240	81240	800ct	12.8ct	3.2	.4	.075	3.5	80	1.5	.38	7.9:1	15.8:1	61.14
71245	81245	800ct	48ct	12	.4	.075	3.5	80	5.8	1.45	4.08:1	8.16:1	92.26
71250	81250	800ct	800ct	200	.4	.075	3.5	80	96	24	1:1	2:1	61.14
71255	81255	900ct	600ct	150	.4	.075	3.3	90	72	18	1.22:1	2.45:1	61.14
71260	81260	1000ct	12ct	3	.4	.075	3.2	100	1.5	0.38	9.13:1	18.3:1	61.14
71265	81265	1000ct	50ct	12.5	.4	.075	3.2	100	6	1.5	4.47:1	8.94:1	67.65
71270	81270	1000ct	1000ct	250	.4	.075	3.2	100	120	30	1:1	2:1	67.65
71275	81275	1060ct	12.8ct	3.2	.4	.075	3.1	106	1.5	.38	9.1:1	18.2:1	61.14
71280	81280	1200ct	12.8ct	3.2	.4	.075	2.9	120	1.5	.38	9.68:1	19.4:1	55.09
71285	81285	1200ct	500ct	125	.4	.075	2.9	120	60	15	1.55:1	3.1:1	55.09
71290	81290	1200ct	1200ct	300	.4	.075	2.9	120	140	35	1:1	2:1	55.09
71295	81295	*1200ct	1200ct	-	.4	.075	2.9	120	140	-	1:1	-	75.30

71300	81300	1500ct	12ct	3	.4	.075	2.6	150	1.5	.38	11.2:1	22.4:1	61.14
71305	81305	1500ct	500ct	125	.4	.075	2.6	150	60	15	1.73:1	3.46:1	67.62
71310	81310	*1500ct	600ct	-	.4	.075	2.6	150	72	-	1.58:1	-	67.65
71315	81315	*1500ct	1500ct	-	.4	.075	2.6	150	180	-	1:1	-	67.65
71320	81320	1600ct	12.8ct	3.2	.4	.075	2.5	160	1.5	.38	11.2:1	22.4:1	61.14
Gull Wing PICO Part Number	J Lead PICO Part Number	Primary Imped Ohms	Secondary Impedence Ohms Split Windings		Power Watts		Primary Unbal DC Current ma	Prim DC Resist Ohms	Secondary DC Resistance Ohms		Turns/Ratio Prim/Sec		Pico Prices 1-9** (US \$)
			SER	PAR	1KHz and higher	400Hz and higher			SER CONN	PAR CONN	SEC SER CONN	SEC PAR CONN	
71325	81325	2000ct	8ct	2	.4	.075	2.2	200	1	.25	15.8:1	31.6:1	79.80
71330	81330	2000ct	2000ct	500	.4	.075	2.2	200	240	60	1:1	2:1	79.80
71335	81335	*2000ct	2000ct	-	.4	.075	2.2	200	240	-	1:1	-	88.39
71340	81340	2000ct	8000ct	2000	.4	.075	2.2	200	960	240	1:2	1:1	79.80
71345	81345	2500ct	2500ct	625	.4	.075	2	250	300	75	1:1	2:1	79.80
71350	81350	3000ct	3000ct	725	.4	.075	1.8	300	360	90	1:1	2:1	64.93
71355	81355	*3000ct	3000ct	-	.4	.075	1.8	300	360	-	1:1	-	88.39
71360	81360	3600ct	3600ct	900	.4	.075	1.7	360	432	108	1:1	2:1	64.93
71365	81365	4000ct	16ct	4	.4	.075	1.6	400	1.9	.47	15.8:1	31.6:1	79.80
71370	81370	4000ct	600ct	150	.4	.075	1.6	400	72	18	2.58:1	5.16:1	79.80
71375	81375	4000ct	1000ct	250	.4	.075	1.6	400	120	30	2:1	4:1	88.39
71380	81380	*4000ct	8000ct	-	.4	.075	1.6	400	960	-	1:1.41	-	88.39
71385	81385	5000ct	500ct	125	.4	.075	1.4	500	60	15	3.16:1	6.32:1	67.65
71390	81390	5000ct	5000ct	1250	.4	.075	1.4	500	600	150	1:1	2:1	67.65
71395	81395	7500ct	50ct	12.5	.33	.075	1.2	750	6	1.5	12.2:1	24.5:1	67.65
71400	81400	7500ct	100ct	25	.33	.075	1.2	750	12	3	8.66:1	17.3:1	67.65
71405	81405	7500ct	600ct	150	.33	.075	1.2	750	72	18	3.54:1	7.07	75.30
71410	81410	7500ct	2500ct	625	.33	.075	1.2	750	300	75	1.73:1	3.46:1	75.30
71415	81415	*7500ct	7500ct	-	.33	.075	1.2	750	900	-	1:1	-	88.39
71420	81420	8000ct	12.8ct	3.2	.3	.075	1.1	800	1.5	.38	25:1	50:1	67.65
71425	81425	8000ct	1000ct	250	.3	.075	1.1	800	120	30	2.83:1	5.66:1	75.30
71430	81430	*8000ct	1200ct	-	.3	.075	1.1	800	144	-	2.58:1	-	88.39
71435	81435	*9000ct	9000ct	-	.27	.075	1.1	900	1080	-	1:1	-	88.39
71440	81440	10,000ct	12.8ct	3.2	.25	.075	1.0	1000	1.5	.38	28:1	56:1	61.14
71445	81445	10,000ct	16ct	4	.25	.075	1.0	1000	1.92	.48	25:1	50:1	61.14
71450	81450	10,000ct	100ct	25	.25	.075	1.0	1000	12	3	10:1	20:1	67.65
71455	81455	10,000ct	200ct	50	.25	.075	1.0	1000	24	6	7.07:1	14.14:1	67.65
71460	81460	10,000ct	500ct	125	.25	.075	1.0	1000	60	15	4.47:1	8.94:1	67.65
71465	81465	10,000ct	600ct	150	.25	.075	1.0	1000	72	18	4.08:1	8.16:1	67.65
71470	81470	10,000ct	1000ct	250	.25	.075	1.0	1000	120	30	3.16:1	6.32:1	67.65
71475	81475	10,000ct	1200ct	300	.25	.075	1.0	1000	144	36	2.89:1	5.77:1	79.80
71480	81480	10,000ct	1500ct	375	.25	.075	1.0	1000	180	45	2.58:1	5.16:1	79.80
71485	81485	10,000ct	2000ct	500	.25	.075	1.0	1000	240	60	2.24:1	4.47:1	78.21
71490	81490	10,000ct	5000ct	1250	.25	.075	1.0	1000	600	150	1.41:1	2.83:1	79.55
71495	81495	10,000ct	7500ct	1875	.25	.075	1.0	1000	900	225	1.15:1	2.3:1	79.80
71500	81500	10,000ct	10,000ct	2500	.25	.075	1.0	1000	1200	300	1:1	2:1	76.93
71505	81505	*10,000ct	10,000ct	-	.25	.075	1.0	1000	1200	-	1:1	-	88.39
71510	81510	15,000ct	400ct	100	.16	.075	.82	1500	48	12	6.12:1	12.24:1	76.93
71515	81515	15,000ct	500ct	125	.16	.075	.82	1500	60	15	5.48:1	10.95:1	76.93
71520	81520	15,000ct	600ct	150	.16	.075	.82	1500	72	18	5:1	10:1	76.93
71525	81525	15,000ct	10,000ct	2500	.16	.075	.82	1500	1200	300	1.22:1	2.45:1	76.93
71530	81530	*15,000ct	15,000ct	-	.16	.075	.82	1500	1800	-	1:1	-	88.39
71535	81535	15,000ct	15,000ct	3750	.16	.075	.82	1500	1800	450	1:1	2:1	79.80
71540	81540	16,000ct	1000ct	250	.15	.075	.8	1600	120	30	4:1	8:1	79.80
71545	81545	20,000ct	500ct	125	.125	.075	.7	2000	60	15	6.33:1	12.65:1	73.66
71550	81550	20,000ct	600ct	150	.125	.075	.7	2000	72	18	5.77:1	11.55:1	73.66
71555	81555	20,000ct	800ct	200	.125	.075	.7	2000	96	24	5:1	10:1	70.41
71560	81560	20,000ct	1000ct	250	.125	.075	.7	2000	120	30	4.47:1	8.94:1	88.39
71565	81565	20,000ct	5000ct	1250	.125	.075	.7	2000	600	150	2:1	4:1	76.93
71570	81570	20,000ct	10,000ct	2500	.125	.075	.7	2000	1200	300	1.41:1	2.83:1	76.93

Gull Wing PICO Part Number	J Lead PICO Part Number	Primary Imped Ohms	Secondary Impedence Ohms Split Windings		Power Watts		Primary Unbal DC Current ma	Prim DC Resist Ohms	Secondary DC Resistance Ohms		Turns/Ratio Prim/Sec		Pico Prices 1-9** (US \$)
			SER	PAR	1KHz and higher	400Hz and higher			SER CONN	PAR CONN	SEC SER CONN	SEC PAR CONN	
71575	81575	*20,000ct	20,000ct	-	.125	.075	.7	2000	2400	-	1:1	-	88.39
71580	81580	25,000ct	500ct	125	.1	.075	.63	2500	60	15	7.07:1	14.14:1	79.80
71585	81585	25,000ct	1000ct	250	.1	.075	.63	2500	120	30	5:1	10:1	79.80
71590	81590	30,000ct	50ct	12.5	.083	.075	.58	3000	6	1.5	24.5:1	49:1	79.80
71595	81595	30,000ct	1200ct	300	.083	.075	.58	3000	144	36	5:1	10:1	79.80
71600	81600	30,000ct	500ct	125	.083	.075	.58	3000	60	15	7.75:1	15.5:1	79.80
71605	81605	30,000ct	200ct	50	.083	.075	.58	3000	24	6	12.25:1	24.5:1	79.80
71610	81610	30,000ct	5000ct	1250	.083	.075	.58	3000	600	150	2.45:1	4.9:1	79.80
71615	81615	30,000ct	10,000ct	2500	.083	.075	.58	3000	1200	300	1.73:1	3.46:1	79.80
71620	81620	*30,000ct	30,000ct	-	.083	.075	.58	3000	3600	-	1:1	-	86.86
71625	81625	40,000ct	400ct	100	.062	.062	.5	4000	48	12	10:1	20:1	86.86

* INCLUDES ELECTROSTATIC SHIELD

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 D.C. current, are listed for each inductor.

Pico Part Number	Pico Part Number	Inductance Series		DC CURRENT	DC Resistance	Prices 1-9** (US \$)
71705	81705	Series	0.1 .08	4 10	25	61.14
		Parallel	.025 .02	8 20	6.5	
71710	81710	Series	.09 .05	2 6	105	61.14
		Parallel	.23 .13	4 12	26	
71715	81715	Series	2.5 0.9	2 4	630	61.14
		Parallel	0.6 0.23	4 8	160	
71720	81720	Series	4.5 1.2	2 4	2300	61.14
		Parallel	1.1 0.3	4 8	575	

**Discount Prices:

- 1-9 Net;
- 10-24 less 10%;
- 25-49 less 16%;
- 50-99 less 23%;
- 100-499 less 30%

Ordering Instructions:

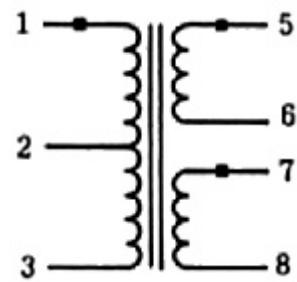
No minimum.
Net 30 days F.O.B. Pelham, NY
Delivery--stock to one week for sample orders.

FEATURES:

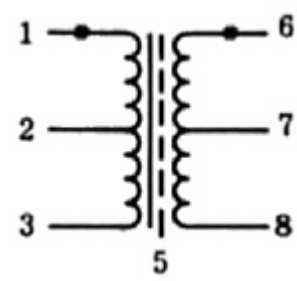
- Extreme resistance to thermal shock
- Ultra Miniature size
- PICO is approved QPL source (MIL-PRF-27)
- Magnetic shield design available
- Electrostatic shielding can be added
- Variation of standard designs available
- Every unit in this catalog can be made with a 300 thermal cycle guarantee using PICO's special SR construction.
Contact factory for details.

Schematics

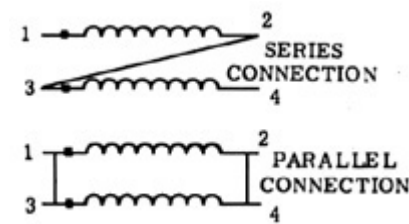
Schematics for Transformers
with Split Secondaries



Schematics for Transformers
with Electrostatic Shield

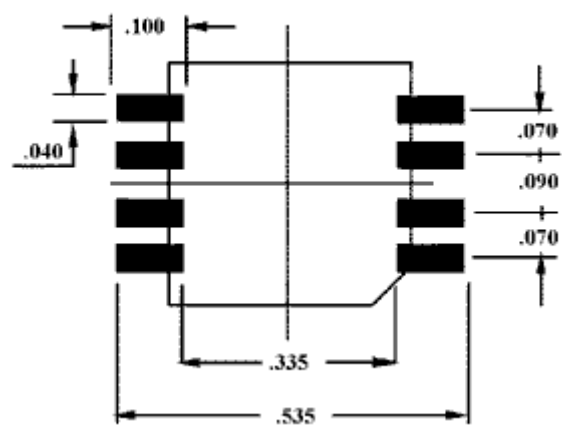


Schematics for Inductors



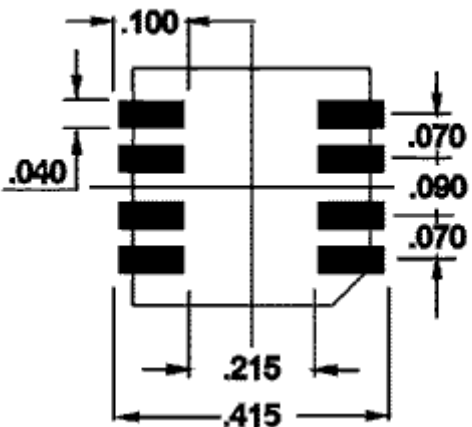
RECOMMENDED LAND PATTERN DIMENSIONS

PICO 71000 Series



RECOMMENDED LAND PATTERN DIMENSIONS

PICO 81000 Series



[Click Here for Thru Hole Version of the 71000 and 81000 Series](#) [3]

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

