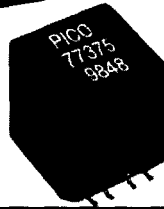
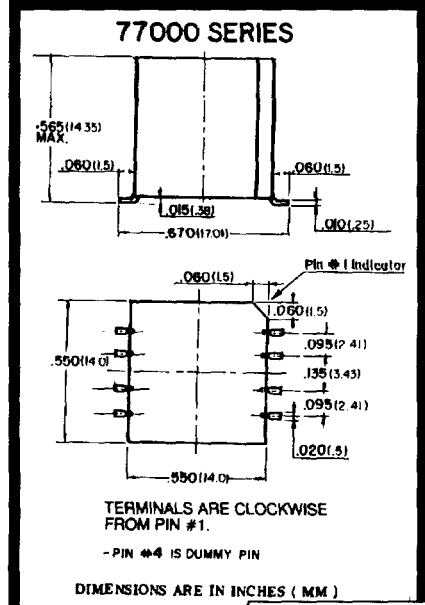


# SURFACE MOUNT

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



**PICO's**  
ultra-miniature  
transformers



For Land Pattern  
Dimensions  
See Pg. 60  
Fig. 7

### SPECIFICATIONS

- **MIL-PRF-27**: All units manufactured to MIL-PRF-27, Grade 5, Class S
- **FREQUENCY RESPONSE**: ±3db, 150 Hz-75 KHz at 1.0 Milli-watt. (When Primary Impedance ≥ 50K Ohms, ± 3db 150 Hz to 20 KHz)
- **MAXIMUM DISTORTION**: 5% With Rated Power Level at 1 KHz, 400 Hz and 150 Hz.
- **DIELECTRIC STRENGTH**: All Units Tested at 200 V RMS.
- **INSULATION RESISTANCE**: Greater Than 10,000 Megohms at 300 V DC.
- **WEIGHT**: 7.5 GRAMS
- **TERMINALS**: Solderability per MIL-STD-202 Method 208.
- **THERMAL SHOCK**: 25 Cycles, Method 107, MIL-STD-202, Test Condition -55°C to +130°C

Delivery -  
stock to one week

**PICO**  
Electronics,  
Inc.

143 Sparks Avenue,  
Pelham, NY 10803-1837  
FAX 914-738-8225

[www.picoelectronics.com](http://www.picoelectronics.com)  
E-Mail: [info@picoelectronics.com](mailto:info@picoelectronics.com)

PICO PART NUMBER	PRIMARY IMPEDANCE OHMS	SECONDARY IMPEDANCE OHMS SPLIT WINDINGS		POWER WATTS			PRIMARY UNBALANCED DC CURRENT ma	PRIMARY DC RESISTANCE OHMS	SECONDARY DC RESISTANCE OHMS		TURNS/RATIO PRIM/SEC		PRICES 1-9***
		SER	PAR	1KHz and higher	400 Hz and higher	150 Hz and higher			SER CONN	PAR CONN	SEC SER CONN	SEC PAR CONN	
77203	20 ct	8 ct	2	1.00	0.75	.11	22.0	1.75	1.0	.25	1.58:1	3.16:1	26.69
77205	20 ct	20 ct	5	1.00	0.75	.11	22.0	1.75	2.5	.63	1:1	2:1	26.69
77210	32 ct	32 ct	8	1.00	0.75	.11	18.0	2.7	3.7	.93	1:1	2:1	26.69
77215	40 ct	40 ct	10	1.00	0.75	.11	16.0	3	5.2	1.3	1:1	2:1	26.69
77218	48 ct	16 ct	4	1.00	0.75	.11	13.0	4.5	2.4	.6	1.73:1	3.46:1	26.69
77220	50 ct	50 ct	12.5	1.00	0.75	.11	13.0	4.5	6.2	1.6	1:1	2:1	26.69
77225	80 ct	32 ct	8	1.00	0.75	.11	11.0	6.6	3.7	.93	1.58:1	3.16:1	26.69
77228	100 ct	40 ct	10	1.00	0.75	.11	10.0	9.7	5.6	1.4	1.58:1	3.16:1	26.69
77230	100 ct	100 ct	25	1.00	0.75	.11	10.0	9.7	11	2.8	1:1	2:1	26.69
77235	120 ct	12.8 ct	3.2	1.00	0.75	.11	9.0	10.8	1.6	.4	3.06:1	6.12:1	26.69
77240	120 ct	60 ct	15	1.00	0.75	.11	9.0	10.8	8.5	2.2	1.41:1	2.83:1	26.69
77245	120 ct	120 ct	30	1.00	0.75	.11	9.0	10.8	15	3.8	1:1	2:1	26.69
77250	150 ct	12 ct	3	1.00	0.75	.11	8.0	13.5	1.75	.44	3.54:1	7.08:1	26.69
77255	150 ct	50 ct	12.5	1.00	0.75	.11	8.0	12	5.8	1.5	1.73:1	3.46:1	26.69
77260	150 ct	100 ct	25	1.00	0.75	.11	8.0	12	13	3.3	1.22:1	2.44:1	26.69
77265	150 ct	150 ct	37.5	1.00	0.75	.11	8.0	12	20	5	1:1	2:1	26.69
77270	150 ct	600 ct	150	1.00	0.75	.11	8.0	12	82	20.5	1:2	1:1	26.69
77275	200 ct	200 ct	50	1.00	0.75	.11	7.0	17	24	6.0	1:1	2:1	26.69
77280	300 ct	12 ct	3	1.00	0.75	.11	5.0	30	1.75	.44	5:1	10:1	26.69
77285	300 ct	50 ct	12.5	1.00	0.75	.11	5.0	27	6.2	1.6	2.45:1	4.9:1	26.69
77290	300 ct	150 ct	37.5	1.00	0.75	.11	5.0	26	21	5.3	1.41:1	2.83:1	26.69
77295	300 ct	300 ct	75	1.00	0.75	.11	5.0	27	38	9.5	1:1	2:1	26.69
77300	300 ct	600 ct	150	1.00	0.75	.11	5.0	27	66	17	1.41:1	1.41:1	26.69
77305	320 ct	12.8 ct	3.2	1.00	0.75	.11	5.0	30	1.75	.44	5:1	10:1	26.69
77310	400 ct	40 ct	10	1.00	0.75	.11	5.0	39	4.3	1.1	3.16:1	6.32:1	26.69
77315	400 ct	120 ct	30	1.00	0.75	.11	5.0	30	14	3.5	1.83:1	3.65:1	26.69
77320	400 ct	200 ct	50	1.00	0.75	.11	5.0	39	24	6	1.41:1	2.83:1	26.69
77325	400 ct	400 ct	100	1.00	0.75	.11	5.0	39	42	10.5	1:1	2:1	26.69
77330	400 ct	1000 ct	250	1.00	0.75	.11	5.0	39	109	28	1:1.58	1.26:1	26.69
77335	400 ct	2000 ct	500	1.00	0.75	.11	5.0	38	198	49	1:2.24	1:1.12	26.69
77340	400 ct	4000 ct	1000	1.00	0.75	.11	5.0	39	436	109	1:3.16	1:1.58	26.69
77342	500 ct	12.8 ct	3.2	1.00	0.75	.11	4.5	43	1.6	.4	6.25:1	12.5:1	26.69
77344	500 ct	16 ct	4	1.00	0.75	.11	4.5	43	2.3	.56	5.6:1	11.2:1	26.69
77345	500 ct	50 ct	12.5	1.00	0.75	.11	4.5	43	5.8	1.5	3.16:1	6.32:1	26.69
77347	500 ct	150 ct	37.5	1.00	0.75	.11	4.5	43	19.8	5	1.83:1	3.65:1	26.69
77350	500 ct	500 ct	125	1.00	0.75	.11	4.5	43	60	15	1:1	2:1	26.69
77355	*500 ct	500 ct	-	1.00	0.75	.11	4.5	43	60	-	1:1	-	27.79
77360	500 ct	600 ct	150	1.00	0.75	.11	4.5	43	66	17	1:1.1	1.83:1	26.69
77365	600 ct	12.8 ct	3.2	1.00	0.75	.11	4.0	68	1.75	.44	6.85:1	13.7:1	26.69
77367	600 ct	30 ct	7.5	1.00	0.75	.11	4.0	60	3.7	.93	4.47:1	8.94:1	26.69
77370	600 ct	48 ct	12	1.00	0.75	.11	4.0	60	5.9	1.5	3.54:1	7.07:1	26.69
77375	600 ct	200 ct	50	1.00	0.75	.11	4.0	60	25	6.3	1.73:1	3.46:1	26.69
77380	600 ct	600 ct	150	1.00	0.75	.11	4.0	60	66	17	1:1	2:1	26.69
77385	*600 ct	600 ct	-	1.00	0.75	.11	4.0	60	68	-	1:1	-	27.79
77386	*600 ct	900 ct	-	1.00	0.75	.11	4.0	60	104	-	1:1.22	-	27.79
77387	600 ct	1200 ct	300	1.00	0.75	.11	4.0	60	116	29	1:1.41	1.41:1	26.69
77390	640 ct	12.8 ct	3.2	1.00	0.75	.11	4.0	69	1.75	.44	7.07:1	14.14:1	26.69
77395	700 ct	100 ct	25	1.00	0.75	.11	4.0	62	10.6	2.7	2.65:1	5.29:1	26.69
77400	800 ct	12.8 ct	3.2	1.00	0.75	.11	3.5	78	1.75	.44	7.91:1	15.8:1	26.69
77405	800 ct	48 ct	12	1.00	0.75	.11	3.5	74	6	1.5	4.08:1	8.16:1	26.69
77410	800 ct	800 ct	200	1.00	0.75	.11	3.5	74	102	26	1:1	2:1	26.69
77415	900 ct	600 ct	150	1.00	0.75	.11	3.0	90	66	17	1.23:1	2.45:1	26.69
77417	*900 ct	900 ct	-	1.00	0.75	.11	3.0	90	102	-	1:1	-	27.79
77420	1000 ct	12 ct	3	1.00	0.75	.11	3.0	115	1.75	.44	9.13:1	18.26:1	26.69
77425	1000 ct	50 ct	12.5	1.00	0.75	.11	3.0	100	5.8	1.5	4.47:1	8.94:1	26.69
77430	1000 ct	1000 ct	250	1.00	0.75	.11	3.0	75	103	26	1:1	2:1	26.69
77435	1060 ct	12.8 ct	3.2	1.00	0.75	.11	3.0	115	1.75	.44	9.1:1	18.2:1	26.69
77440	1200 ct	12.8 ct	3.2	1.00	0.75	.11	3.0	122	1.75	.44	9.68:1	19.4:1	26.69
77445	1200 ct	500 ct	125	1.00	0.75	.11	3.0	113	63	16	1.55:1	3.1:1	26.69
77450	1200 ct	1200 ct	300	1.00	0.75	.11	3.0	113	155	39	1:1	2:1	26.69
77455	*1200 ct	1200 ct	-	1.00	0.75	.11	3.0	109	150	-	1:1	-	27.79
77460	1500 ct	12 ct	3	1.00	0.75	.11	2.5	140	1.75	.44	11.18:1	22.36:1	26.69
77465	1500 ct	500 ct	125	1.00	0.75	.11	2.5	150	60	15	1.73:1	3.46:1	26.69
77470	*1500 ct	600 ct	-	1.00	0.75	.11	2.5	150	66	-	1.58:1	-	27.79
77475	*1500 ct	1500 ct	-	1.00	0.75	.11	2.5	150	168	-	1:1	-	27.79
77480	1600 ct	12.8 ct	3.2	1.00	0.75	.11	2.5	140	1.75	.44	11.18:1	22.36:1	26.69
77483	2000 ct	8 ct	2	1.00	0.75	.11	2.0	250	1.0	.25	15.8:1	31.6:1	26.69
77485	2000 ct	2000 ct	500	1.00	0.75	.11	2.0	185	255	64	1:1	2:1	26.69
77490	*2000 ct	2000 ct	-	1.00	0.75	.11	2.0	175	240	-	1:1	-	27.79
77495	2000 ct	8000 ct	2000	1.00	0.75	.11	2.0	185	1015	254	1:2	1:1	27.79
77497	2500 ct	2500 ct	625	1.00	0.75	.11	2.0	245	268	68	1:1	2:1	27.79
77500	3000 ct	3000 ct	750	1.00	0.75	.11	1.8	267	295	74	1:1	2:1	27.79
77505	*3000 ct	3000 ct	-	1.00	0.75	.11	1.8	267	368	-	1:1	-	27.79
77510	3600 ct	3600 ct	900	1.00	0.75	.11	1.5	300	413	103	1:1	2:1	26.69
77512	4000 ct	16 ct	4	1.00	0.75	.11	1.5	395	2.5	.65	15.8:1	31.6:1	26.69
77514	4000 ct	600 ct	150	1.00	0.75	.11	1.5	395	66	17	2.58:1	5.16:1	26.69

\*\*\*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, New York

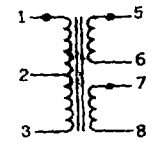
\*INCLUDES ELECTROSTATIC SHIELD

For immediate engineering assistance or to place an order

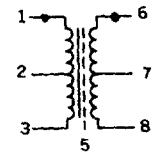
**SURFACE MOUNT**  
 PICO surface mount units utilize materials and methods to withstand extreme temperatures of vapor phase, I.R., and other reflow procedures without degradation of electrical or mechanical characteristics

PICO PART NUMBER	PRIMARY IMPEDANCE OHMS	SECONDARY IMPEDANCE OHMS SPLIT WINDINGS		POWER WATTS			PRIMARY UNBALANCED DC CURRENT ma	PRIMARY DC resistance OHMS	SECONDARY DC RESISTANCE OHMS		TURNS/RATIO PRM/SEC		PRICES 1-9***
		SER	PAR	1KHz and higher	400 Hz and higher	150 Hz and higher			SER CONN	PAR CONN	SEC SER CONN	SEC PAR CONN	
77515	4000 ct	1000 ct	250	1.0	.75	.11	1.5	395	108	27	2:1	4:1	26.69
77520	*4000 ct	8000 ct	-	1.0	.75	.11	1.5	390	955	-	1:1.41	-	27.79
77525	5000 ct	500 ct	125	1.0	.75	.11	1.3	450	62	16	3.16:1	6.32:1	26.69
77530	5000 ct	5000 ct	1250	1.0	.75	.11	1.3	450	620	155	1:1	2:1	26.89
77535	7500 ct	50 ct	12.5	1.0	.75	.11	1.0	670	6	1.5	12.25:1	24.5:1	29.62
77540	7500 ct	100 ct	25	1.0	.75	.11	1.0	670	11	2.8	8.66:1	17.32:1	29.62
77545	7500 ct	600 ct	150	1.0	.75	.11	1.0	670	66	16.5	3.54:1	7.07:1	29.62
77550	7500 ct	2500 ct	625	1.0	.75	.11	1.0	670	268	67	1.73:1	3.46:1	29.62
77555	*7500 ct	7500 ct	-	1.0	.75	.11	1.0	670	925	-	1:1	-	32.66
77560	8000 ct	12.8 ct	3.2	1.0	.75	.11	1.0	785	1.75	.44	25:1	50:1	29.62
77565	8000 ct	1000 ct	250	1.0	.75	.11	1.0	695	106	28.5	2.83:1	5.66:1	29.62
77570	*8000 ct	1200 ct	-	1.0	.75	.11	1.0	715	153	-	2.58:1	-	32.66
77575	*9000 ct	9000 ct	-	1.0	.75	.11	1.0	925	1020	-	1:1	-	32.66
77580	10,000 ct	12.8 ct	3.2	1.0	.75	.11	1.0	788	1.6	.4	28:1	56:1	29.62
77585	10,000 ct	16 ct	4	1.0	.75	.11	1.0	756	1.7	.43	25:1	50:1	29.62
77590	10,000 ct	100 ct	25	1.0	.75	.11	1.0	780	10	2.5	10:1	20:1	29.62
77595	10,000 ct	200 ct	50	1.0	.75	.11	1.0	780	24	6	7.07:1	14.14:1	29.62
77600	10,000 ct	500 ct	125	1.0	.75	.11	1.0	780	60	15	4.47:1	8.94:1	29.62
77605	10,000 ct	600 ct	150	1.0	.75	.11	1.0	780	83	21	4.08:1	8.16:1	29.62
77610	10,000 ct	1000 ct	250	1.0	.75	.11	1.0	780	106	27	3.16:1	6.32:1	29.62
77615	10,000 ct	1200 ct	300	1.0	.75	.11	1.0	780	145	36	2.89:1	5.77:1	29.62
77620	10,000 ct	1500 ct	375	1.0	.75	.11	1.0	780	160	40	2.58:1	5.16:1	29.62
77625	10,000 ct	2000 ct	500	1.0	.75	.11	1.0	780	300	75	2.24:1	4.47:1	29.62
77630	10,000 ct	5000 ct	1250	1.0	.75	.11	1.0	780	610	153	1.41:1	2.83:1	29.62
77635	10,000 ct	7500 ct	1875	1.0	.75	.11	1.0	780	932	233	1.18:1	2.31:1	29.62
77640	10,000 ct	10,000 ct	2500	1.0	.75	.11	1.0	780	1075	269	1:1	2:1	29.62
77645	*10,000 ct	10,000 ct	-	1.0	.75	.11	1.0	715	985	-	1:1	-	32.66
77650	15,000 ct	400 ct	100	.66	.66	.11	0.8	1165	52	13	6.12:1	12.25:1	29.62
77652	15,000 ct	500 ct	125	.66	.66	.11	0.8	1165	60	15	5.48:1	10.95:1	29.62
77655	15,000 ct	600 ct	150	.66	.66	.11	0.8	1165	80	20	5:1	10:1	29.62
77660	15,000 ct	10,000 ct	2500	.66	.66	.11	0.8	1165	1050	263	1.22:1	2.45:1	29.62
77665	*15,000 ct	15,000 ct	-	.66	.66	.11	0.8	1165	1600	-	1:1	-	32.66
77670	15,000 ct	15,000 ct	3750	.66	.66	.11	0.8	1165	1600	400	1:1	2:1	29.62
77675	16,000 ct	1000 ct	250	.62	.62	.11	0.8	1560	108	27	4:1	8:1	29.62
77680	20,000 ct	500 ct	125	.5	.5	.11	0.7	1750	60	15	6.32:1	12.65:1	29.62
77685	20,000 ct	600 ct	150	.5	.5	.11	0.7	1750	82	20.5	5.77:1	11.55:1	32.66
77690	20,000 ct	800 ct	200	.5	.5	.11	0.7	1750	98	24.5	5:1	10:1	32.66
77695	20,000 ct	1000 ct	250	.5	.5	.11	0.7	1750	135	34	4.47:1	8.94:1	32.66
77700	20,000 ct	5000 ct	1250	.5	.5	.11	0.7	1750	610	153	2:1	4:1	32.66
77705	20,000 ct	10,000 ct	2500	.5	.5	.11	0.7	1750	1075	269	1.41:1	2.83:1	32.66
77710	*20,000 ct	20,000 ct	-	.5	.5	.11	0.7	1715	2370	-	1:1	-	32.66
77715	25,000 ct	500 ct	125	.4	.4	.11	0.6	2470	60	15	7.07:1	14.14:1	32.98
77720	25,000 ct	1000 ct	250	.4	.4	.11	0.6	2470	106	27	5:1	10:1	32.66
77725	30,000 ct	50 ct	12.5	.33	.33	.11	0.5	2730	6.2	1.6	24.5:1	49:1	32.66
77730	30,000 ct	1200 ct	300	.33	.33	.11	0.5	2815	156	39	5:1	10:1	32.98
77732	30,000 ct	500 ct	125	.33	.33	.11	0.5	2730	61	15.3	7.7:1	15.5:1	32.98
77734	30,000 ct	200 ct	50	.33	.33	.11	0.5	2730	24	6	12.2:1	24.5:1	32.98
77735	30,000 ct	5000 ct	1250	.33	.33	.11	0.5	2730	620	155	2.45:1	4.9:1	32.98
77740	30,000 ct	10,000 ct	2500	.33	.33	.11	0.5	2730	1090	272	1.73:1	3.46:1	32.98
77745	*30,000 ct	30,000 ct	-	.33	.33	.11	0.5	2730	3740	-	1:1	-	35.41
77750	40,000 ct	400 ct	100	.25	.25	.11	0.5	3150	53	13	10:1	20:1	35.41
77755	40,000 ct	2000 ct	500	.25	.25	.11	0.5	3150	300	75	4.47:1	8.94:1	35.41
77760	40,000 ct	4000 ct	1000	.25	.25	.11	0.5	3150	548	137	3.16:1	6.32:1	35.41
77765	40,000 ct	20,000 ct	5000	.25	.25	.11	0.5	3150	3075	769	1.41:1	2.83:1	35.41
77770	*40,000 ct	40,000 ct	-	.25	.25	.11	0.5	3940	4350	-	1:1	-	39.49
77775	50,000 ct	200 ct	50	.2	.2	.11	0.4	4275	24	6	15.8:1	31.6:1	39.49
77777	50,000 ct	500 ct	125	.2	.2	.11	0.4	4275	60	15	10:1	20:1	39.49
77778	50,000 ct	600 ct	150	.2	.2	.11	0.4	4275	82	21	9.13:1	18.26:1	39.49
77779	50,000 ct	50,000 ct	12,500	.2	.2	.11	0.4	4900	6270	1568	1:1	2:1	39.49
77780	80,000 ct	15,000 ct	3750	.16	.16	.11	0.4	5960	1650	412	2:1	4:1	42.78
77785	82,500 ct	50 ct	12.5	.16	.16	.11	0.4	5960	6	1.5	35.4:1	70.7:1	42.78
77787	80,000 ct	15,000 ct	3750	.12	.12	.11	0.3	7200	1690	423	2.3:1	4.6:1	42.76
77789	80,000 ct	80,000 ct	20,000	.12	.12	.11	0.3	7200	9920	2480	1:1	2:1	42.76
77790	90,000 ct	10,000 ct	2500	.11	.11	.11	0.3	7500	1350	338	3:1	6:1	44.70
77795	95,000 ct	15,000 ct	3750	.1	.1	.10	0.3	9550	1635	410	2.5:1	5:1	44.70
77800	100,000 ct	80 ct	15	.1	.1	.10	0.3	10,000	8.5	2.2	40.8:1	81.6:1	44.70
77805	100,000 ct	100 ct	25	.1	.1	.10	0.3	10,000	14	3.5	31.6:1	63.2:1	44.70
77810	100,000 ct	500 ct	125	.1	.1	.10	0.3	10,000	62	15.5	14.1:1	28.3:1	44.70
77813	100,000 ct	1000 ct	250	.1	.1	.10	0.3	10,000	140	35	10:1	20:1	44.70
77814	100,000 ct	2000 ct	500	.1	.1	.10	0.3	10,000	248	62	7.07:1	14.14:1	44.70
77815	100,000 ct	10,000 ct	2500	.1	.1	.10	0.3	10,000	1075	270	3.16:1	6.32:1	44.70
77820	135,000 ct	82 ct	20.5	.074	.074	.074	0.25	13,700	9.5	2.4	40.6:1	81.2:1	46.76
77823	200,000 ct	500 ct	125	.05	.05	.05	0.2	17,340	75	19	20:1	40:1	46.76
77825	200,000 ct	1000 ct	250	.05	.05	.05	0.2	17,340	133	33	14.1:1	28.3:1	46.76
77830	200,000 ct	10,000 ct	2500	.05	.05	.05	0.2	17,340	1350	336	4.47:1	8.94:1	46.76
77835	200,000 ct	20,000 ct	5000	.05	.05	.05	0.2	17,340	3000	750	3.16:1	6.32:1	47.94
77837	250,000 ct	200 ct	50	.04	.04	.04	0.2	17,340	28	7	35.4:1	70.7:1	47.94
77840	250,000 ct	1000 ct	250	.04	.04	.04	0.2	17,340	118	30	15.8:1	31.6:1	47.94

**SCHEMATIC FOR TRANSFORMERS WITH SPLIT WINDING**



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