

N & K · 77000 & CSN Series

2-250kΩ, 150-75kHz, 1W Max. @ 1kHz+ Audio Transformer

PICO
Electronics, Inc.

PRODUCT OVERVIEW

The N & K and 77000 & CSN series are ultra-miniature transformers in an encapsulated package with design layouts as through-hole or surface mount types. They can operate over a wide temperature range of -55°C to +130°C. Our proprietary materials and methods allow extreme temperatures of vapor phase, IR or other reflow procedures without degrading the high reliability of their physical form and electrical performance.

Typical applications:

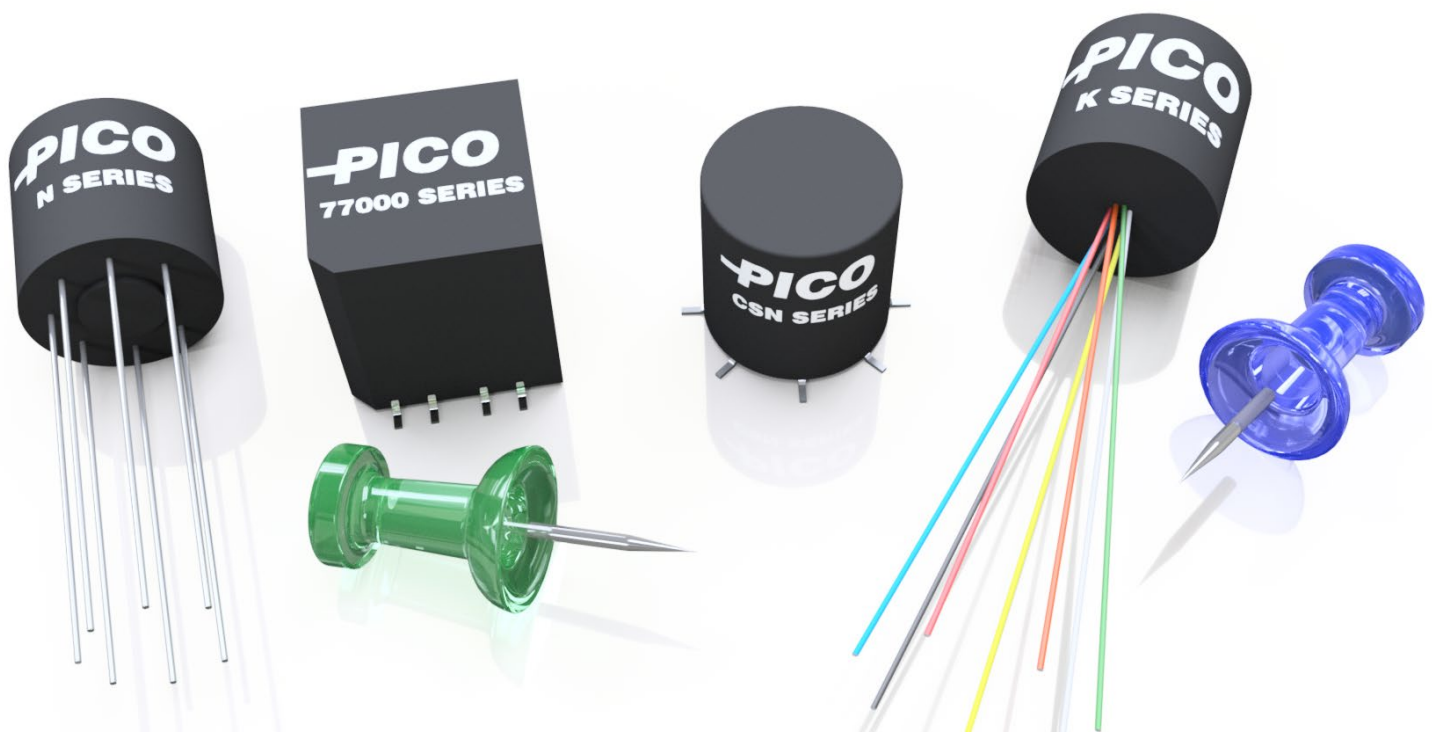
- Sensors
- Radars
- Avionic flight controls
- Airborne systems
- Naval electronics
- Military, aerospace, or commercial aircraft

FEATURES

- Extreme resistance to impact, shock, and vibration
- Manufactured to MIL-PRF-27, Class S, Grade 5
- High reliability for space and mission critical applications
- Ultra miniature in size and minimalistic design
- Design layouts in straight plug-in, insulated leads, square SMT, or round SMT
- Available with magnetic shielding and/or electrostatic shielding
- Certain parts are QPL approved

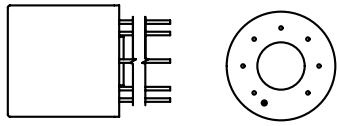
Contact Pico for part number of available options:

- Screening and qualification criteria to flight standard
- Capability to thermal shock up to 300 cycles
- Extra layers of magnetic shielding
- Fully RoHS compliant or with exemption 7(a)
- Modifications to mechanical design and electrical characteristics
- Custom new design and parameters

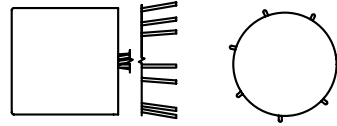


SPECIFICATIONS

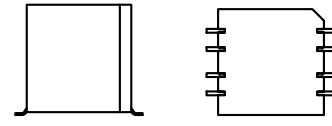
**N SERIES
(STRAIGHT LEADS)**



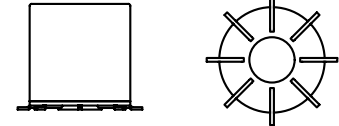
**K SERIES
(INSULATED LEADS)**



**77000 SERIES
(SQUARE SURFACE MOUNT)**



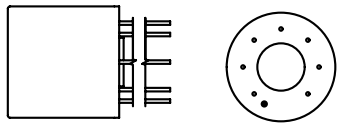
**CSN SERIES
(ROUND SURFACE MOUNT)**



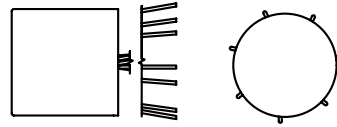
Through Hole		Surface Mount		Primary Impedance [Ω]	Secondary Impedance with Split Windings		Power			Primary Unbalanced DC Current [mA]	Primary DCR [Ω]	Secondary DCR		Turns Ratio PRI:SEC	
Straight	Insulated	Square	Round		Series [Ω]	Parallel [Ω]	1kHz+ [W]	400Hz+ [W]	150Hz+ [W]			Series [Ω]	Parallel [Ω]	Series	Parallel
N-6203	K-7203	77203	CSN203	20 CT	8 CT	2	1	0.75	0.11	22	1.75	1	0.25	1.58:1	3.16:1
N-6205	K-7205	77205	CSN205	20 CT	20 CT	5	1	0.75	0.11	22	1.75	2.5	0.63	1:1	2:1
N-6210	K-7210	77210	CSN210	32 CT	32 CT	8	1	0.75	0.11	18	2.7	3.7	0.93	1:1	2:1
N-6215	K-7215	77215	CSN215	40 CT	40 CT	10	1	0.75	0.11	16	3	5.2	1.3	1:1	2:1
N-6218	K-7218	77218	CSN218	48 CT	16 CT	4	1	0.75	0.11	13	4.5	2.4	0.6	1.73:1	3.46:1
N-6220	K-7220	77220	CSN220	50 CT	50 CT	12.5	1	0.75	0.11	13	4.5	6.2	1.6	1:1	2:1
N-6225	K-7225	77225	CSN225	80 CT	32 CT	8	1	0.75	0.11	11	6.6	3.7	0.93	1.58:1	3.16:1
N-6228	K-7228	77228	CSN228	100 CT	40 CT	10	1	0.75	0.11	10	9.7	5.6	1.4	1.58:1	3.16:1
N-6230	K-7230	77230	CSN230	100 CT	100 CT	25	1	0.75	0.11	10	9.7	11	2.8	1:1	2:1
N-6235	K-7235	77235	CSN235	120 CT	12.8 CT	3.2	1	0.75	0.11	9	10.8	1.6	0.4	3.06:1	6.12:1
N-6240	K-7240	77240	CSN240	120 CT	60 CT	15	1	0.75	0.11	9	10.8	8.5	2.2	1.41:1	2.83:1
N-6245	K-7245	77245	CSN245	120 CT	120 CT	30	1	0.75	0.11	9	10.8	15	3.8	1:1	2:1
N-6250	K-7250	77250	CSN250	150 CT	12 CT	3	1	0.75	0.11	8	13.5	1.75	0.44	3.54:1	7.08:1
N-6255	K-7255	77255	CSN255	150 CT	50 CT	12.5	1	0.75	0.11	8	12	5.8	1.5	1.73:1	3.46:1
N-6260	K-7260	77260	CSN260	150 CT	100 CT	25	1	0.75	0.11	8	12	13	3.3	1.22:1	2.44:1
N-6265	K-7265	77265	CSN265	150 CT	150 CT	37.5	1	0.75	0.11	8	12	20	5	1:1	2:1
N-6270	K-7270	77270	CSN270	150 CT	600 CT	150	1	0.75	0.11	8	12	82	20.5	1:2	1:1
N-6275	K-7275	77275	CSN275	200 CT	200 CT	50	1	0.75	0.11	7	17	24	6	1:1	2:1
N-6280	K-7280	77280	CSN280	300 CT	12 CT	3	1	0.75	0.11	5	30	1.75	0.44	5:1	10:1
N-6285	K-7285	77285	CSN285	300 CT	50 CT	12.5	1	0.75	0.11	5	27	6.2	1.6	2.45:1	4.9:1
N-6290	K-7290	77290	CSN290	300 CT	150 CT	37.5	1	0.75	0.11	5	26	21	5.3	1.41:1	2.83:1
N-6295	K-7295	77295	CSN295	300 CT	300 CT	75	1	0.75	0.11	5	27	38	9.5	1:1	2:1
N-6300	K-7300	77300	CSN300	300 CT	600 CT	150	1	0.75	0.11	5	27	66	17	1.41:1	1.41:1
N-6305	K-7305	77305	CSN305	320 CT	12.8 CT	3.2	1	0.75	0.11	5	30	1.75	0.44	5:1	10:1
N-6310	K-7310	77310	CSN310	400 CT	40 CT	10	1	0.75	0.11	5	39	4.3	1.1	3.16:1	6.32:1
N-6315	K-7315	77315	CSN315	400 CT	120 CT	30	1	0.75	0.11	5	30	14	3.5	1.83:1	3.65:1

SPECIFICATIONS

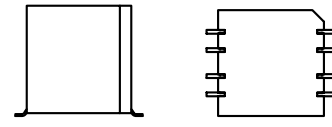
**N SERIES
(STRAIGHT LEADS)**



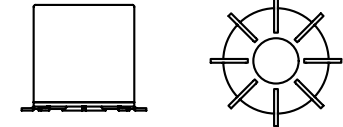
**K SERIES
(INSULATED LEADS)**



**77000 SERIES
(SQUARE SURFACE MOUNT)**



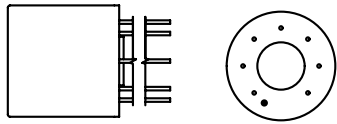
**CSN SERIES
(ROUND SURFACE MOUNT)**



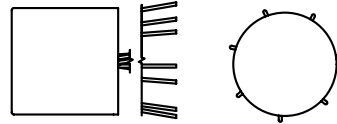
Through Hole		Surface Mount		Primary Impedance [Ω]	Secondary Impedance with Split Windings		Power			Primary Unbalanced DC Current [mA]	Primary DCR [Ω]	Secondary DCR		Turns Ratio PRI:SEC	
Straight	Insulated	Square	Round		Series [Ω]	Parallel [Ω]	1kHz+ [W]	400Hz+ [W]	150Hz+ [W]			Series [Ω]	Parallel [Ω]	Series	Parallel
N-6320	K-7320	77320	CSN320	400 CT	200 CT	50	1	0.75	0.11	5	39	24	6	1.41:1	2.83:1
N-6325	K-7325	77325	CSN325	400 CT	400 CT	100	1	0.75	0.11	5	39	42	10.5	1:1	2:1
N-6330	K-7330	77330	CSN330	400 CT	1000 CT	250	1	0.75	0.11	5	39	109	28	1:1.58	1.26:1
N-6335	K-7335	77335	CSN335	400 CT	2000 CT	500	1	0.75	0.11	5	39	198	49	1:2.24	1:1.12
N-6340	K-7340	77340	CSN340	400 CT	4000 CT	1000	1	0.75	0.11	5	39	436	109	1:3.16	1:1.58
N-6342	K-7342	77342	CSN342	500 CT	12.8 CT	3.2	1	0.75	0.11	4.5	43	1.6	0.4	6.25:1	12.5:1
N-6344	K-7344	77344	CSN344	500 CT	16 CT	4	1	0.75	0.11	4.5	43	2.3	0.56	5.6:1	11.2:1
N-6345	K-7345	77345	CSN345	500 CT	50 CT	12.5	1	0.75	0.11	4.5	43	5.8	1.5	3.16:1	6.32:1
N-6347	K-7347	77347	CSN347	500 CT	150 CT	37.5	1	0.75	0.11	4.5	43	19.8	5	1.83:1	3.65:1
N-6350	K-7350	77350	CSN350	500 CT	500 CT	125	1	0.75	0.11	4.5	43	60	15	1:1	2:1
(1) N-6355	K-7355	77355	CSN355	500 CT	500 CT	-	1	0.75	0.11	4.5	43	60	-	1:1	-
N-6360	K-7360	77360	CSN360	500 CT	600 CT	150	1	0.75	0.11	4.5	43	66	17	1:1.1	1.83:1
N-6365	K-7365	77365	CSN365	600 CT	12.8 CT	3.2	1	0.75	0.11	4	68	1.75	0.44	6.85:1	13.7:1
N-6367	K-7367	77367	CSN367	600 CT	30 CT	7.5	1	0.75	0.11	4	60	3.7	0.93	4.47:1	8.94:1
N-6370	K-7370	77370	CSN370	600 CT	48 CT	12	1	0.75	0.11	4	60	5.9	1.5	3.54:1	7.07:1
N-6375	K-7375	77375	CSN375	600 CT	200 CT	50	1	0.75	0.11	4	60	25	6.3	1.73:1	3.46:1
N-6380	K-7380	77380	CSN380	600 CT	600 CT	150	1	0.75	0.11	4	60	66	17	1:1	2:1
(1) N-6385	K-7385	77385	CSN385	600 CT	600 CT	-	1	0.75	0.11	4	60	68	-	1:1	-
(1) N-6386	K-7386	77386	CSN386	600 CT	900 CT	-	1	0.75	0.11	4	60	104	-	1:1.22	-
N-6387	K-7387	77387	CSN387	600 CT	1200 CT	300	1	0.75	0.11	4	60	116	29	1:1.41	1.41:1
N-6390	K-7390	77390	CSN390	640 CT	12.8 CT	3.2	1	0.75	0.11	4	69	1.75	0.44	7.07:1	14.14:1
N-6395	K-7395	77395	CSN395	700 CT	100 CT	25	1	0.75	0.11	4	62	10.6	2.7	2.65:1	5.29:1
N-6400	K-7400	77400	CSN400	800 CT	12.8 CT	3.2	1	0.75	0.11	3.5	78	1.75	0.44	7.91:1	15.8:1
N-6405	K-7405	77405	CSN405	800 CT	48 CT	12	1	0.75	0.11	3.5	74	6	1.5	4.08:1	8.16:1
N-6410	K-7410	77410	CSN410	800 CT	800 CT	200	1	0.75	0.11	3.5	74	102	26	1:1	2:1
N-6415	K-7415	77415	CSN415	900 CT	600 CT	150	1	0.75	0.11	3	90	66	17	1.23:1	2.45:1

SPECIFICATIONS

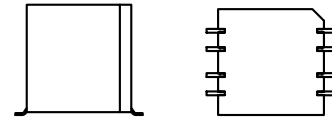
**N SERIES
(STRAIGHT LEADS)**



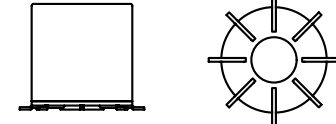
**K SERIES
(INSULATED LEADS)**



**77000 SERIES
(SQUARE SURFACE MOUNT)**



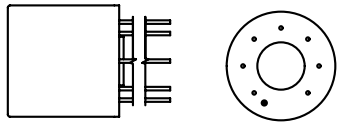
**CSN SERIES
(ROUND SURFACE MOUNT)**



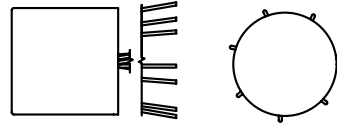
	Through Hole		Surface Mount		Primary Impedance [Ω]	Secondary Impedance with Split Windings		Power			Primary Unbalanced DC Current [mA]	Primary DCR [Ω]	Secondary DCR		Turns Ratio PRI:SEC	
	Straight	Insulated	Square	Round		Series [Ω]	Parallel [Ω]	1kHz+ [W]	400Hz+ [W]	150Hz+ [W]			Series [Ω]	Parallel [Ω]	Series	Parallel
(1)	N-6417	K-7417	77417	CSN417	900 CT	900 CT	-	1	0.75	0.11	3	90	102	-	1:1	-
	N-6420	K-7420	77420	CSN420	1000 CT	12 CT	3	1	0.75	0.11	3	115	1.75	0.44	9.13:1	18.26:1
	N-6425	K-7425	77425	CSN425	1000 CT	50 CT	12.5	1	0.75	0.11	3	100	5.8	1.5	4.47:1	8.94:1
	N-6430	K-7430	77430	CSN430	1000 CT	1000 CT	250	1	0.75	0.11	3	75	103	26	1:1	2:1
	N-6435	K-7435	77435	CSN435	1060 CT	12.8 CT	3.2	1	0.75	0.11	3	115	1.75	0.44	9.1:1	18.2:1
	N-6440	K-7440	77440	CSN440	1200 CT	12.8 CT	3.2	1	0.75	0.11	3	122	1.75	0.44	9.68:1	19.4:1
	N-6445	K-7445	77445	CSN445	1200 CT	500 CT	125	1	0.75	0.11	3	113	63	16	1.55:1	3.1:1
	N-6450	K-7450	77450	CSN450	1200 CT	1200 CT	300	1	0.75	0.11	3	113	155	39	1:1	2:1
(1)	N-6455	K-7455	77455	CSN455	1200 CT	1200 CT	-	1	0.75	0.11	3	109	150	-	1:1	-
	N-6460	K-7460	77460	CSN460	1500 CT	12 CT	3	1	0.75	0.11	2.5	140	1.75	0.44	11.18:1	22.36:1
	N-6465	K-7465	77465	CSN465	1500 CT	500 CT	125	1	0.75	0.11	2.5	150	60	15	1.73:1	3.46:1
(1)	N-6470	K-7470	77470	CSN470	1500 CT	600 CT	-	1	0.75	0.11	2.5	150	66	-	1.58:1	-
(1)	N-6475	K-7475	77475	CSN475	1500 CT	1500 CT	-	1	0.75	0.11	2.5	150	168	-	1:1	-
	N-6480	K-7480	77480	CSN480	1600 CT	12.8 CT	3.2	1	0.75	0.11	2.5	140	1.75	0.44	11.18:1	22.36:1
	N-6483	K-7483	77483	CSN483	2000 CT	8 CT	2	1	0.75	0.11	2	250	1	0.25	15.8:1	31.6:1
	N-6485	K-7485	77485	CSN485	2000 CT	2000 CT	500	1	0.75	0.11	2	185	255	64	1:1	2:1
(1)	N-6490	K-7490	77490	CSN490	2000 CT	2000 CT	-	1	0.75	0.11	2	175	240	-	1:1	-
	N-6495	K-7495	77495	CSN495	2000 CT	8000 CT	2000	1	0.75	0.11	2	185	1015	254	1:2	1:1
	N-6597	K-7497	77497	CSN497	2500 CT	2500 CT	625	1	0.75	0.11	2	245	268	68	1:1	2:1
	N-6500	K-7500	77500	CSN500	3000 CT	3000 CT	750	1	0.75	0.11	1.8	267	295	74	1:1	2:1
(1)	N-6505	K-7505	77505	CSN505	3000 CT	3000 CT	-	1	0.75	0.11	1.8	267	368	-	1:1	-
	N-6510	K-7510	77510	CSN510	3600 CT	3600 CT	900	1	0.75	0.11	1.5	300	413	103	1:1	2:1
	N-6512	K-7512	77512	CSN512	4000 CT	16 CT	4	1	0.75	0.11	1.5	395	2.5	0.65	15.8:1	31.6:1
	N-6514	K-7514	77514	CSN514	4000 CT	600 CT	150	1	0.75	0.11	1.5	395	66	17	2.58:1	5.16:1
	N-6515	K-7515	77515	CSN515	4000 CT	1000 CT	250	1	0.75	0.11	1.5	395	108	27	2:1	4:1
(1)	N-6520	K-7520	77520	CSN520	4000 CT	8000 CT	-	1	0.75	0.11	1.5	390	955	-	1:1.41	-

SPECIFICATIONS

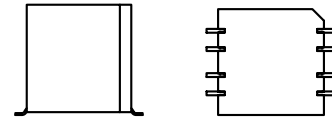
**N SERIES
(STRAIGHT LEADS)**



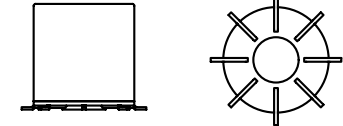
**K SERIES
(INSULATED LEADS)**



**77000 SERIES
(SQUARE SURFACE MOUNT)**



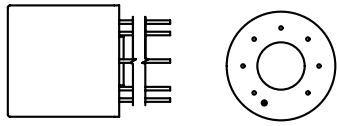
**CSN SERIES
(ROUND SURFACE MOUNT)**



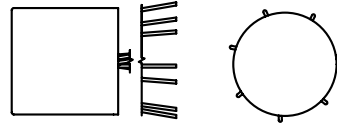
	Through Hole		Surface Mount		Primary Impedance [Ω]	Secondary Impedance with Split Windings		Power			Primary Unbalanced DC Current [mA]	Primary DCR [Ω]	Secondary DCR		Turns Ratio PRI:SEC	
	Straight	Insulated	Square	Round		Series [Ω]	Parallel [Ω]	1kHz+ [W]	400Hz+ [W]	150Hz+ [W]			Series [Ω]	Parallel [Ω]	Series	Parallel
	N-6525	K-7525	77525	CSN525	5000 CT	500 CT	125	1	0.75	0.11	1.3	450	62	16	3.16:1	6.32:1
	N-6530	K-7530	77530	CSN530	5000 CT	5000 CT	1250	1	0.75	0.11	1.3	450	620	155	1:1	2:1
	N-6535	K-7535	77535	CSN535	7500 CT	50 CT	12.5	1	0.75	0.11	1	670	6	1.5	12.25:1	24.5:1
	N-6540	K-7540	77540	CSN540	7500 CT	100 CT	25	1	0.75	0.11	1	670	11	2.8	8.66:1	17.32:1
	N-6545	K-7545	77545	CSN545	7500 CT	600 CT	150	1	0.75	0.11	1	670	66	16.5	3.54:1	7.07:1
	N-6550	K-7550	77550	CSN550	7500 CT	2500 CT	625	1	0.75	0.11	1	670	268	67	1.73:1	3.46:1
(1)	N-6555	K-7555	77555	CSN555	7500 CT	7500 CT	-	1	0.75	0.11	1	670	925	-	1:1	-
	N-6560	K-7560	77560	CSN560	8000 CT	12.8 CT	3.2	1	0.75	0.11	1	765	1.75	0.44	25:1	50:1
	N-6565	K-7565	77565	CSN565	8000 CT	1000 CT	250	1	0.75	0.11	1	695	106	26.5	2.83:1	5.66:1
(1)	N-6570	K-7570	77570	CSN570	8000 CT	1200 CT	-	1	0.75	0.11	1	715	153	-	2.58:1	-
(1)	N-6575	K-7575	77575	CSN575	9000 CT	9000 CT	-	1	0.75	0.11	1	925	1020	-	1:1	-
	N-6580	K-7580	77580	CSN580	10,000 CT	12.8 CT	3.2	1	0.75	0.11	1	768	1.6	0.4	28:1	56:1
	N-6585	K-7585	77585	CSN585	10,000 CT	16 CT	4	1	0.75	0.11	1	756	1.7	0.43	25:1	50:1
	N-6590	K-7590	77590	CSN590	10,000 CT	100 CT	25	1	0.75	0.11	1	780	10	2.5	10:1	20:1
	N-6595	K-7595	77595	CSN595	10,000 CT	200 CT	50	1	0.75	0.11	1	780	24	6	7.07:1	14.14:1
	N-6600	K-7600	77600	CSN600	10,000 CT	500 CT	125	1	0.75	0.11	1	780	60	15	4.47:1	8.94:1
	N-6605	K-7605	77605	CSN605	10,000 CT	600 CT	150	1	0.75	0.11	1	780	83	21	4.08:1	8.16:1
	N-6610	K-7610	77610	CSN610	10,000 CT	1000 CT	250	1	0.75	0.11	1	780	106	27	3.16:1	6.32:1
	N-6615	K-7615	77615	CSN615	10,000 CT	1200 CT	300	1	0.75	0.11	1	780	145	36	2.89:1	5.77:1
	N-6620	K-7620	77620	CSN620	10,000 CT	1500 CT	375	1	0.75	0.11	1	780	160	40	2.58:1	5.16:1
	N-6625	K-7625	77625	CSN625	10,000 CT	2000 CT	500	1	0.75	0.11	1	780	300	75	2.24:1	4.47:1
	N-6630	K-7630	77630	CSN630	10,000 CT	5000 CT	1250	1	0.75	0.11	1	780	610	153	1.41:1	2.83:1
	N-6635	K-7635	77635	CSN635	10,000 CT	7500 CT	1875	1	0.75	0.11	1	780	932	233	1.16:1	2.31:1
	N-6640	K-7640	77640	CSN640	10,000 CT	10,000 CT	2500	1	0.75	0.11	1	780	1075	269	1:1	2:1
(1)	N-6645	K-7645	77645	CSN645	10,000 CT	10,000 CT	-	1	0.75	0.11	1	715	985	-	1:1	-
	N-6650	K-7650	77650	CSN650	15,000 CT	400 CT	100	0.66	0.66	0.11	0.8	1165	52	13	6.12:1	12.25:1

SPECIFICATIONS

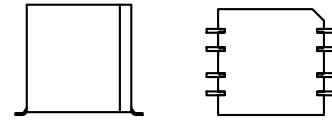
**N SERIES
(STRAIGHT LEADS)**



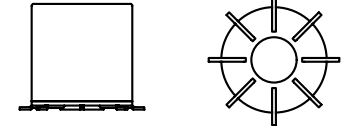
**K SERIES
(INSULATED LEADS)**



**77000 SERIES
(SQUARE SURFACE MOUNT)**



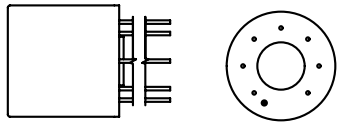
**CSN SERIES
(ROUND SURFACE MOUNT)**



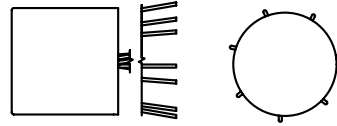
	Through Hole		Surface Mount		Primary Impedance [Ω]	Secondary Impedance with Split Windings		Power			Primary Unbalanced DC Current [mA]	Primary DCR [Ω]	Secondary DCR		Turns Ratio PRI:SEC	
	Straight	Insulated	Square	Round		Series [Ω]	Parallel [Ω]	1kHz+ [W]	400Hz+ [W]	150Hz+ [W]			Series [Ω]	Parallel [Ω]	Series	Parallel
	N-6652	K-7652	77652	CSN652	15,000 CT	500 CT	125	0.66	0.66	0.11	0.8	1165	60	15	5.48:1	10.95:1
	N-6655	K-7655	77655	CSN655	15,000 CT	600 CT	150	0.66	0.66	0.11	0.8	1165	80	20	5:1	10:1
	N-6660	K-7660	77660	CSN660	15,000 CT	10,000 CT	2500	0.66	0.66	0.11	0.8	1165	1050	263	1.22:1	2.45:1
(1)	N-6665	K-7665	77665	CSN665	15,000 CT	15,000 CT	-	0.66	0.66	0.11	0.8	1165	1600	-	1:1	-
	N-6670	K-7670	77670	CSN670	15,000 CT	15,000 CT	3750	0.66	0.66	0.11	0.8	1165	1600	400	1:1	2:1
	N-6675	K-7675	77675	CSN675	16,000 CT	1000 CT	250	0.62	0.62	0.11	0.8	1560	108	27	4:1	8:1
	N-6680	K-7680	77680	CSN680	20,000 CT	500 CT	125	0.5	0.5	0.11	0.7	1750	60	15	6.32:1	12.65:1
	N-6685	K-7685	77685	CSN685	20,000 CT	600 CT	150	0.5	0.5	0.11	0.7	1750	82	20.5	5.77:1	11.55:1
	N-6690	K-7690	77690	CSN690	20,000 CT	800 CT	200	0.5	0.5	0.11	0.7	1750	98	24.5	5:1	10:1
	N-6695	K-7695	77695	CSN695	20,000 CT	1000 CT	250	0.5	0.5	0.11	0.7	1750	135	34	4.47:1	8.94:1
	N-6700	K-7700	77700	CSN700	20,000 CT	5000 CT	1250	0.5	0.5	0.11	0.7	1750	610	153	2:1	4:1
	N-6705	K-7705	77705	CSN705	20,000 CT	10,000 CT	2500	0.5	0.5	0.11	0.7	1750	1075	269	1.41:1	2.83:1
(1)	N-6710	K-7710	77710	CSN710	20,000 CT	20,000 CT	-	0.5	0.5	0.11	0.7	1715	2370	-	1:1	-
	N-6715	K-7715	77715	CSN715	25,000 CT	500 CT	125	0.4	0.4	0.11	0.6	2470	60	15	7.07:1	14.14:1
	N-6720	K-7720	77720	CSN720	25,000 CT	1000 CT	250	0.4	0.4	0.11	0.6	2470	106	27	5:1	10:1
	N-6725	K-7725	77725	CSN725	30,000 CT	50 CT	12.5	0.33	0.33	0.11	0.5	2730	6.2	1.6	24.5:1	49:1
	N-6730	K-7730	77730	CSN730	30,000 CT	1200 CT	300	0.33	0.33	0.11	0.5	2815	156	39	5:1	10:1
	N-6732	K-7732	77732	CSN732	30,000 CT	500 CT	125	0.33	0.33	0.11	0.5	2730	61	15.3	7.7:1	15.5:1
	N-6734	K-7734	77734	CSN734	30,000 CT	200 CT	50	0.33	0.33	0.11	0.5	2730	24	6	12.2:1	24.5:1
	N-6735	K-7735	77735	CSN735	30,000 CT	5000 CT	1250	0.33	0.33	0.11	0.5	2730	620	155	2.45:1	4.9:1
	N-6740	K-7740	77740	CSN740	30,000 CT	10,000 CT	2500	0.33	0.33	0.11	0.5	2730	1090	272	1.73:1	3.46:1
(1)	N-6745	K-7745	77745	CSN745	30,000 CT	30,000 CT	-	0.33	0.33	0.11	0.5	2730	3740	-	1:1	-
	N-6750	K-7750	77750	CSN750	40,000 CT	400 CT	100	0.25	0.25	0.11	0.5	3150	53	13	10:1	20:1
	N-6755	K-7755	77755	CSN755	40,000 CT	2000 CT	500	0.25	0.25	0.11	0.5	3150	300	75	4.47:1	8.94:1
	N-6760	K-7760	77760	CSN760	40,000 CT	4000 CT	1000	0.25	0.25	0.11	0.5	3150	548	137	3.16:1	6.32:1
	N-6765	K-7765	77765	CSN765	40,000 CT	20,000 CT	5000	0.25	0.25	0.11	0.5	3150	3075	769	1.41:1	2.83:1

SPECIFICATIONS

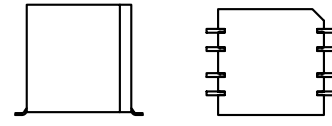
N SERIES (STRAIGHT LEADS)



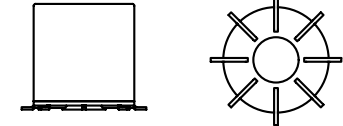
K SERIES (INSULATED LEADS)



77000 SERIES (SQUARE SURFACE MOUNT)



CSN SERIES (ROUND SURFACE MOUNT)



	Through Hole		Surface Mount		Primary Impedance [Ω]	Secondary Impedance with Split Windings		Power			Primary Unbalanced DC Current [mA]	Primary DCR [Ω]	Secondary DCR		Turns Ratio PRI:SEC	
	Straight	Insulated	Square	Round		Series [Ω]	Parallel [Ω]	1kHz+ [W]	400Hz+ [W]	150Hz+ [W]			Series [Ω]	Parallel [Ω]	Series	Parallel
(1) N-6770	K-7770	77770	CSN770	40,000 CT	40,000 CT	-	0.25	0.25	0.11	0.5	3940	4350	-	1:1	-	
N-6775	K-7775	77775	CSN775	50,000 CT	200 CT	50	0.2	0.2	0.11	0.4	4275	24	6	15.8:1	31.6:1	
N-6777	K-7777	77777	CSN777	50,000 CT	500 CT	125	0.2	0.2	0.11	0.4	4275	60	15	0:1	20:1	
N-6778	K-7778	77778	CSN778	50,000 CT	600 CT	150	0.2	0.2	0.11	0.4	4275	82	21	9.13:1	18.26:1	
N-6779	K-7779	77779	CSN779	50,000 CT	50,000 CT	12,500	0.2	0.2	0.11	0.4	4500	6270	1568	1:1	2:1	
N-6780	K-7780	77780	CSN780	60,000 CT	15,000 CT	3750	0.16	0.16	0.11	0.4	5960	1650	412	2:1	4:1	
N-6785	K-7785	77785	CSN785	62,500 CT	50 CT	12.5	0.16	0.16	0.11	0.4	5960	6	1.5	35.4:1	70.7:1	
N-6787	K-7787	77787	CSN787	80,000 CT	15,000 CT	3750	0.12	0.12	0.11	0.3	7200	1690	423	2.3:1	4.6:1	
N-6789	K-7789	77789	CSN789	80,000 CT	80,000 CT	20,000	0.12	0.12	0.11	0.3	7200	9920	2480	1:1	2:1	
N-6790	K-7790	77790	CSN790	90,000 CT	10,000 CT	2500	0.11	0.11	0.11	0.3	7500	1350	338	3:1	6:1	
N-6795	K-7795	77795	CSN795	95,000 CT	15,000 CT	3750	0.1	0.1	0.1	0.3	9550	1635	410	2.5:1	5:1	
N-6800	K-7800	77800	CSN800	100,000 CT	60 CT	15	0.1	0.1	0.1	0.3	10,000	8.5	2.2	40.8:1	81.6:1	
N-6805	K-7805	77805	CSN805	100,000 CT	100 CT	25	0.1	0.1	0.1	0.3	10,000	14	3.5	31.6:1	63.2:1	
N-6810	K-7810	77810	CSN810	100,000 CT	500 CT	125	0.1	0.1	0.1	0.3	10,000	62	15.5	14.1:1	28.3:1	
N-6813	K-7813	77813	CSN813	100,000 CT	1000 CT	250	0.1	0.1	0.1	0.3	10,000	140	35	10:1	20:1	
N-6814	K-7814	77814	CSN814	100,000 CT	2000 CT	500	0.1	0.1	0.1	0.3	10,000	248	62	7.07:1	14.14:1	
N-6815	K-7815	77815	CSN815	100,000 CT	10,000 CT	2500	0.1	0.1	0.1	0.3	10,000	1075	270	3.16:1	6.32:1	
N-6820	K-7820	77820	CSN820	135,000 CT	82 CT	20.5	0.074	0.074	0.074	0.25	13,700	9.5	2.4	40.6:1	81.2:1	
N-6823	K-7823	77823	CSN823	200,000 CT	500 CT	125	0.05	0.05	0.05	0.2	17,340	75	19	20:1	40:1	
N-6825	K-7825	77825	CSN825	200,000 CT	1000 CT	250	0.05	0.05	0.05	0.2	17,340	133	33	14.1:1	28.3:1	
N-6830	K-7830	77830	CSN830	200,000 CT	10,000 CT	2500	0.05	0.05	0.05	0.2	17,340	1350	336	4.47:1	8.94:1	
N-6835	K-7835	77835	CSN835	200,000 CT	20,000 CT	5000	0.05	0.05	0.05	0.2	17,340	3000	750	3.16:1	6.32:1	
N-6837	K-7837	77837	CSN837	250,000 CT	200 CT	50	0.04	0.04	0.04	0.2	17,340	28	7	35.4:1	70.7:1	
N-6840	K-7840	77840	CSN840	250,000 CT	1000 CT	250	0.04	0.04	0.04	0.2	17,340	118	30	15.8:1	31.6:1	

Note 1: Includes electrostatic shield

SPECIFICATIONS

GENERAL

Parameter	Condition	Min.	Typ.	Max.	Units
Dielectric Strength	60Hz	-	200	-	V _{RMS}
Insulation Resistance	300VDC	10	-	-	GΩ
Distortion	150, 400, 1kHz @ Rated Power	-	-	5	%
Frequency Response	150 - 75 kHz @ 1mW, Primary Impedance < 50kΩ	-3	-	3	dB
	150 - 20 kHz @ 1mW, Primary Impedance ≥ 50kΩ				
Operating Temperature Range	Ambient with temperature rise	-55	-	+130	°C
Storage Temperature Range	Ambient	-55	-	+105	°C
Size	K Series - Diameter x Height	0.5 x 0.5 (12.7 x 12.7)			inches (mm)
	N Series - Diameter x Height	0.5 x 0.5 (12.7 x 12.7)			
	CSN Series - Diameter x Height	0.5 x 0.525 (12.7 x 13.335)			
	77000 Series - Length x Width x Height	0.55 x 0.55 x 0.565 (13.97 x 13.97 x 14.351)			
Weight	K, N, CSN & 77000 Series	-	7.5	-	grams
Case	N, K & CSN Series	Epoxy Insulated Metal			
	77000 Series	Glass Reinforced Polymer			
Potting	Vacuum Impregnated Epoxy				
Box Packaging (L x W x H)	N & K Series	10.5 x 6.42 x 0.79 (266.7 x 163.068 x 20.066)			inches
Tube Packaging (W x H x L)	77000 & CSN Series	0.93 x 0.73 x 20.0 (23.724 x 18.542 x 508)			(mm)
Tape & Reel Packaging	Upon request				
Moisture Sensitivity Level	Surface Mount only	Level 3			

OPTIONAL DESIGN CRITERIA

Test	Standard	Description
Vibration	MIL-STD-202	Method 204, Vibration, High Frequency
Shock	MIL-STD-202	Method 213, Shock (Specified Pulse)
Immersion	MIL-STD-202	Method 104, Immersion
Moisture Resistance	MIL-STD-202	Method 106, Moisture Resistance
Flammability	MIL-STD-202	Method 111, Flammability (External Flame)
Thermal Shock	MIL-STD-202	Method 107, Thermal Shock

OPTIONAL SCREENING AND QUALIFICATION

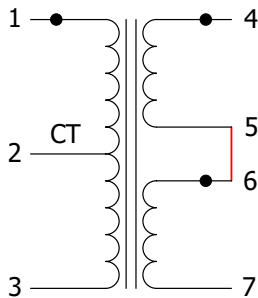
Standard	Screening & Qualification	Test ⁽²⁾
MIL-PRF-27	a.) Group A inspection Level-T - Table VII b.) Qualification inspection, Grade 5 - Table V	I. Thermal Shock II. Vibration III. Burn-in IV. Induced Voltage V. Shock VI. Dielectric Withstanding Voltage (at reduced pressure) VII. Insulation Resistance VIII. Electrical Characteristics IX. Visual and Mechanical Examination (External) X. Life XI. Radiographic Inspection
MIL-STD-981	a.) Group A screening tests - Table VI b.) Group B tests - Table XII, Class S	
EEE-INST-002, Section M1	a.) Magnetics Screening Req. - Table 2 b.) Magnetics Part Qual. - Table 3	

Note 2: Screening and qualification tests are not limited to the options in the chart above. Each standard may also be stringent or exclude certain tests from one another. Please contact Pico for specific application needs and for Pico part number.

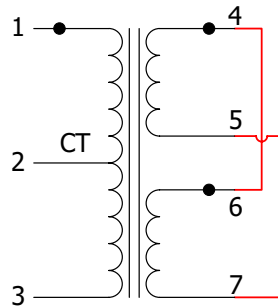
ELECTRICAL SCHEMATIC

N SERIES - THROUGH HOLE

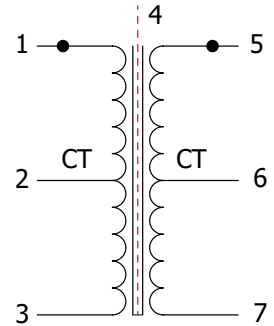
**SPLIT SECONDARIES
SERIES CONNECTION**



**SPLIT SECONDARIES
PARALLEL CONNECTION**

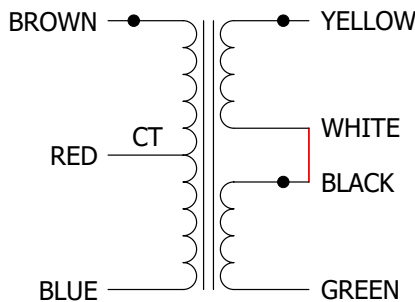


ELECTROSTATIC SHIELD

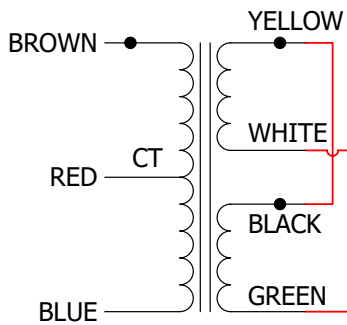


K SERIES - INSULATED LEADS

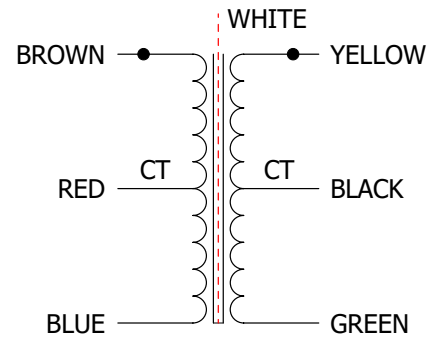
**SPLIT SECONDARIES
SERIES CONNECTION**



**SPLIT SECONDARIES
PARALLEL CONNECTION**

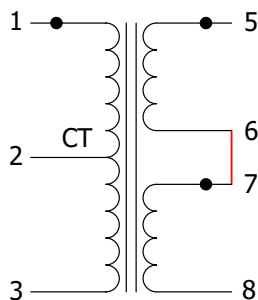


ELECTROSTATIC SHIELD

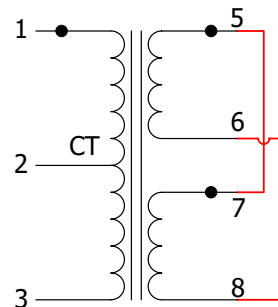


77000 & CSN SERIES - SURFACE MOUNT

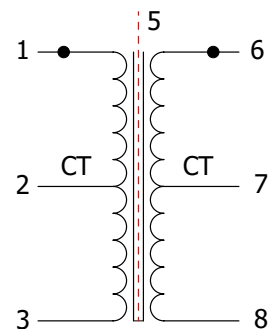
**SPLIT SECONDARIES
SERIES CONNECTION**



**SPLIT SECONDARIES
PARALLEL CONNECTION**



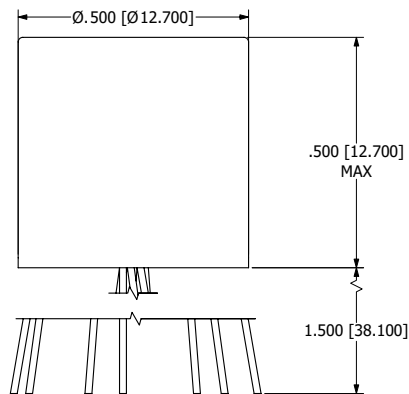
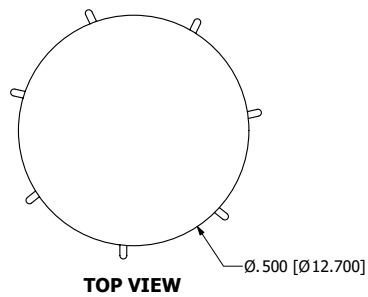
ELECTROSTATIC SHIELD



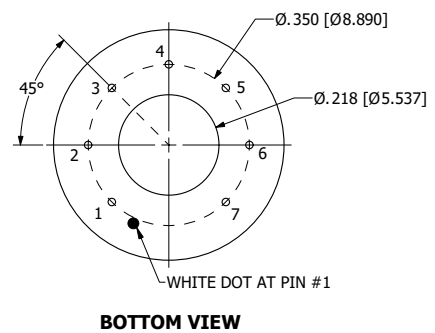
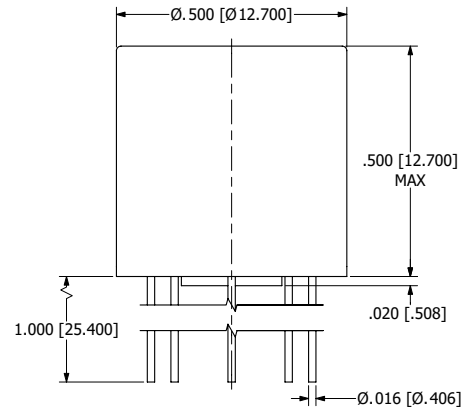
NOTES

- a. ANY TERMINALS NOT SHOWN HERE MAY BE USED FOR MECHANICAL STABILITY ON THE PCB ONLY, AS THEY DO NOT HAVE ANY ELECTRICAL CONNECTION.
- b. CT STANDS FOR "CENTER-TAP", WHERE THE TOTAL NUMBER OF TURNS IS EVENLY SPLIT BETWEEN THE TOP HALF AND BOTTOM HALF OF A COMPLETE WINDING.

K SERIES - INSULATED LEADS



N SERIES - THROUGH HOLE

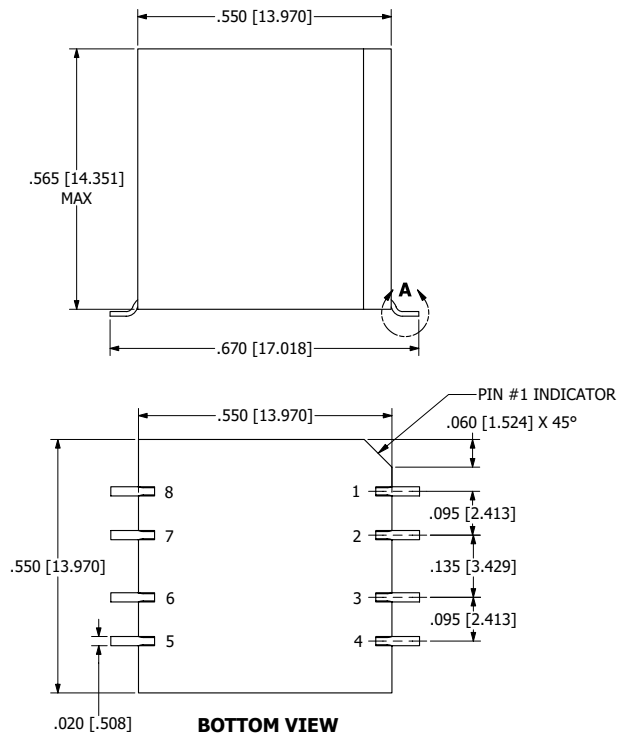


NOTES

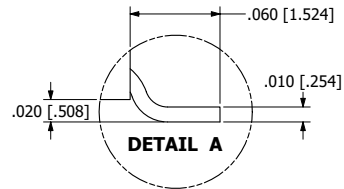
- a. ALL DIMENSIONS ARE IN INCHES, [] = MM
- b. TERMINALS ARE CLOCKWISE FROM PIN #1

MECHANICAL DRAWINGS

77000 SERIES - SQUARE SURFACE MOUNT



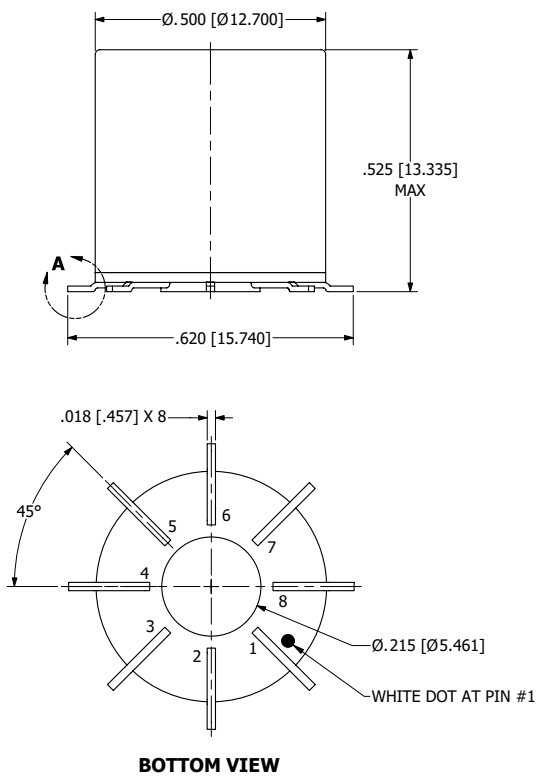
LEAD DETAILS



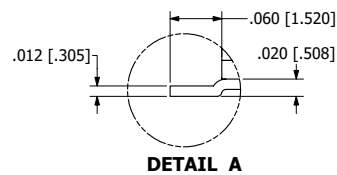
NOTES

- a. ALL DIMENSIONS ARE IN INCHES, [] = MM
- b. TERMINALS ARE CLOCKWISE FROM PIN #1
- c. PIN #4 HAS NO CONNECTION

CSN SERIES - ROUND SURFACE MOUNT

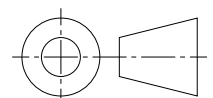


LEAD DETAILS



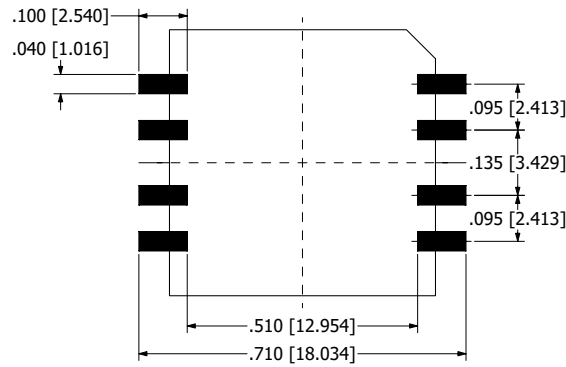
NOTES

- a. ALL DIMENSIONS ARE IN INCHES, [] = MM
- b. TERMINALS ARE CLOCKWISE FROM PIN #1
- c. PIN #4 HAS NO CONNECTION

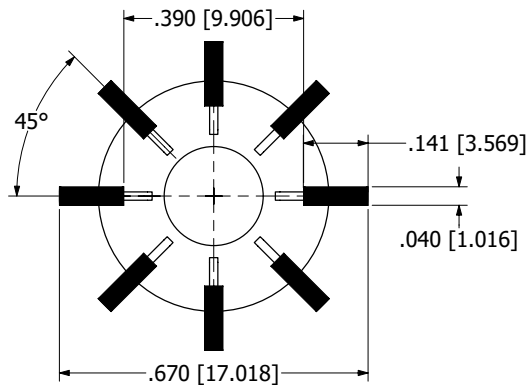


RECOMMENDED LAND PATTERN DIMENSIONS

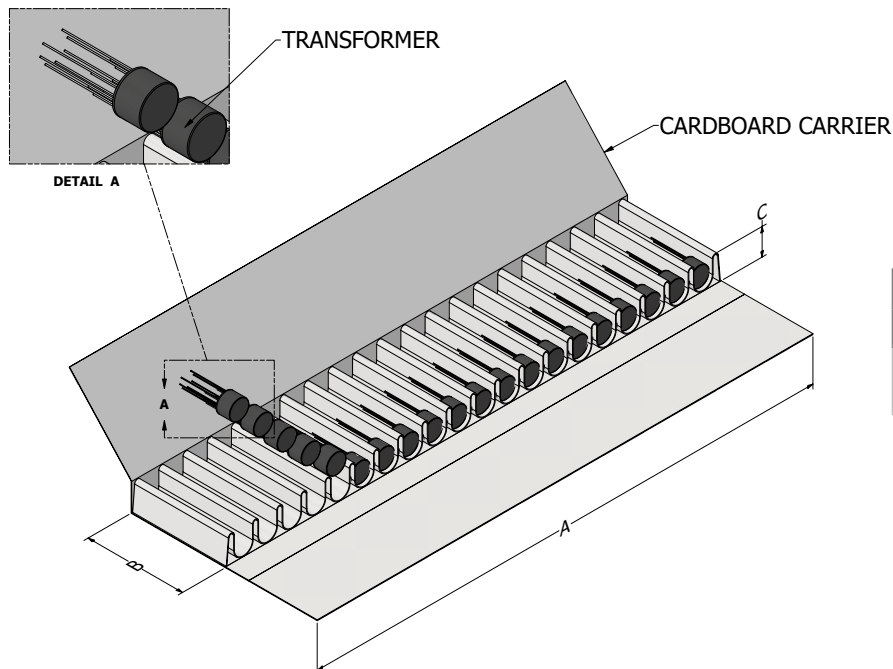
SERIES 77000 - SQUARE SURFACE MOUNT



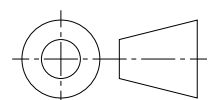
SERIES CSN - ROUND SURFACE MOUNT



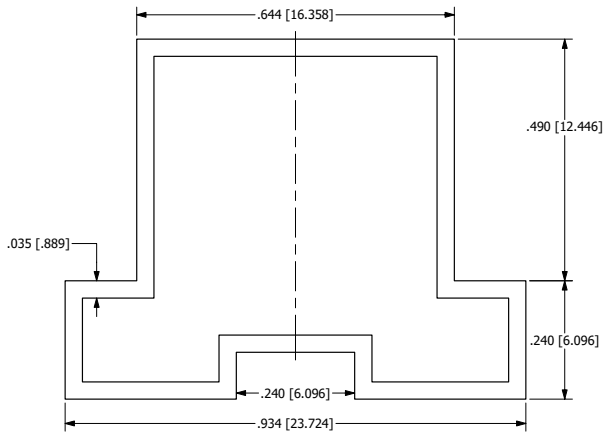
BOX PACKAGING - N & K SERIES



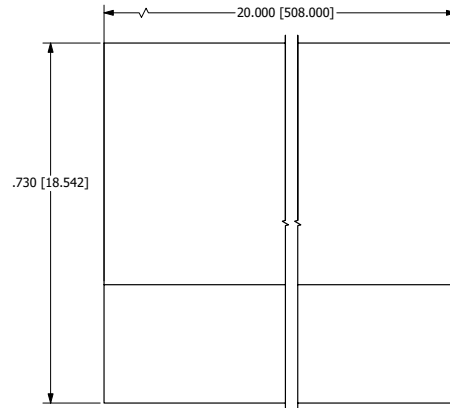
Dimension		
A	B	C
10.5	6.42	0.79
[266.7]	[163.068]	[20.066]



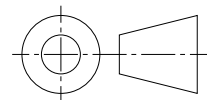
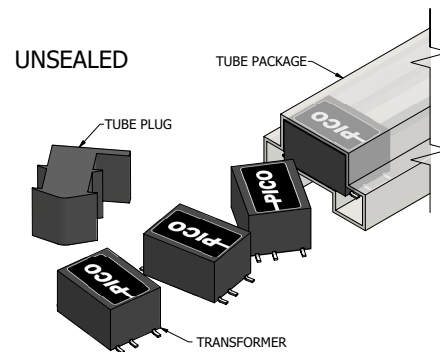
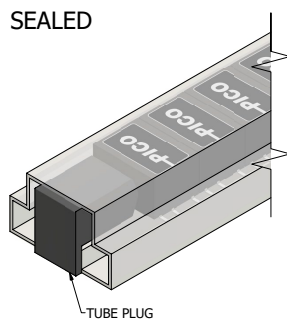
TUBE PACKAGING - 77000 & CSN SERIES



PLAN VIEW



ELEVATION VIEW



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