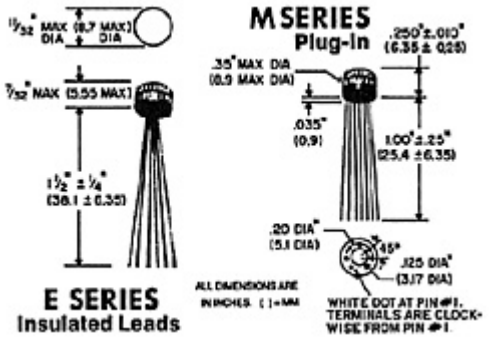
PICO Electronics

Ultra-Miniature PULSE Transformers

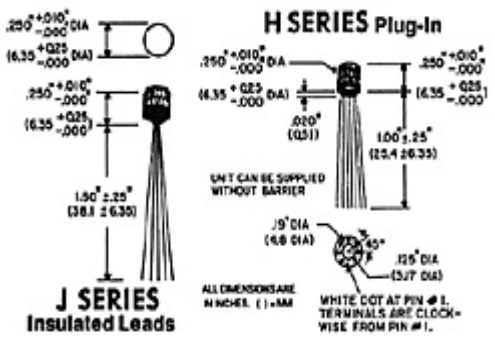
H Series Thru Hole, J Series Insulated leads
M Series Thru Hole, E Series Insulated leads

Specifications

- **MIL-PRF-21038:** All units manufactured to MIL-PRF-21038.
- **DIELECTRIC STRENGTH:** All Units Tested at 200 V RMS.
- **INSULATION RESISTANCE:** Greater Than 10,000 Megohms at 300 V DC.
- **WEIGHT:** 1.6 Grams.
- **OPERATING TEMPERATURE:** -55º C to +130º C.
- **TERMINALS:** Solid .012 Diameter Conductor. Solderability per MIL-STD-202 Method 208.
- **THERMAL SHOCK:** 25 Cycles, Method 107, MIL-STD-202, Test Condition -55º C to +130º C.



Larger size drawing of E/M Series [1]



Larger size drawing of J/H Series [2]

TURNS RATIO 4:4:1

Pico Part Number		Coupling Circuit Characteristics							Blocking Oscillator Circuit					Pico Prices 1-9 * (US $)	
H Series Thru Hole In	J Series Insul. Leads	P Width µSec	Volt Out	Rise Time	% Over Shoot	Droop %	% Back Swing	Imp* In-Out	P Width µSec	Rise Time	% Over Shoot	Droop %	% Back Swing	H Series	J Series
H-5400	J-5600	0.05	0.2	0.01	0	0	20	50	0.05	0.01	0	0	35	73.31	65.29
H-5405	J-5605	0.1	0.5	0.015	0	0	20	50	0.1	0.012	0	0	25	73.31	65.29
H-5410	J-5610	0.2	1.2	0.02	0	0	20	100	0.2	0.02	0	0	15	73.31	65.29
H-5415	J-5615	0.5	1.5	0.023	0	5	25	100	0.5	0.023	0	5	15	73.31	65.29
H-5420	J-5620	1	1.5	0.025	0	20	28	100	1	0.03	0	10	15	73.31	65.29
H-5425	J-5625	2	1.5	0.028	0	15	23	100	2	0.035	0	10	15	73.31	65.29
H-5430	J-5630	3	1.5	0.030	0	15	28	100	3	0.040	0	10	15	73.31	65.29
H-5435	J-5635	5	2	0.035	0	20	20	200	5	0.040	0	15	15	73.31	65.29
H-5440	J-5640	10	2	0.05	0	25	25	200	10	0.060	0	15	10	73.31	65.29
H-5445	J-5645	15	2	0.06	0	25	18	200	15	0.070	0	15	15	73.31	65.29
H-5450	J-5650	25	3	0.1	0	30	30	500	25	0.08	0	15	15	73.31	65.29
H-5455	J-5655	50	3	0.3	0	20	20	500	50	0.2	0	10	5	73.31	65.29
H-5460	J-5660	100	6	0.4	0	15	18	500	100	0.35	0	10	15	73.31	65.29
Coupling circuit measurements made with (1)BRN - (2)RED as input and (3) or - (4)YEL as output, (5)GRN - (6)BLU winding is open: Input Voltage=1V															

Pico Part Number		Coupling Circuit Characteristics								Blocking Oscillator Circuit					D.C. Resistance			Pico Prices 1-9* (US $)	
E Series Insul. Leads	M Series Thru Hole In	P Width µSec.	Volt Out	Rise Time µSec.	% Ov. Sh.	Droop %	% Bk. Sw.	Imp in/ out.	Freq Resp. Within 3db	P Width µSec.	Rise Time µSec.	% Ov. Sh.	Droop %	% Bk. Sw.	4 tns brn red	4 tns or yel	1 Turn grn blu	E Series	M Series

E-5020	M-5300	0.05	10	0.018	0	0	10	50	150KHz-	0.05	0.02	0	0	35	0.21	0.23	0.13	50.70	56.44
E-5040	M-5305	0.1	10	0.02	0	0	5	50	30MHz	0.1	0.025	0	0	25	0.47	0.56	0.17	50.70	56.44
E-5060	M-5310	0.2	8	0.035	0	0	5	100	100KHz-	0.2	0.030	0	0	15	1.0	1.25	0.37	50.70	56.44
E-5080	M-5315	0.5	8	0.06	0	0	0	100	17MHz	0.5	0.05	0	0	15	1.5	1.80	0.54	50.70	56.44
E-5100	M-5320	1	8	0.15	0	0	5	100	16KHz-10MHz	1	0.08	0	0	15	2.5	3.1	0.9	50.70	56.44
E-5120	M-5325	2	8	0.17	0	0	10	100	7KHz-3.3MHz	2	0.10	0	0	15	3.0	3.7	1.1	50.70	56.44
E-5140	M-5330	3	8	0.20	0	0	10	100	7KHz-2.3MHz	3	0.20	0	0	15	4.9	6.0	1.8	50.70	56.44
E-5160	M-5335	5	8	0.20	0	15	25	200	2.2KHz-	5	0.30	0	0	3	8.0	9.7	2.9	50.70	56.44
E-5180	M-5340	10	8	0.4	0	15	20	200	1.3MHz	10	0.35	0	5	10	13.0	15.8	4.7	50.70	56.44
									1.7KHz-										
									1.5MHz										
									1.8KHz-										
									1.5MHz										
									1.5KHz-										
									1.2MHz										
TURNS RATIO 5:3:1 5 turns 3 turns 1 turn																			
E-5200	M-5345	0.1	8	0.01	0	0	5	140/50	170KHz-	0.1	0.01	0	0	20	0.55	0.40	0.15	50.91	56.72
E-5220	M-5350	1	8	0.05	0	6	10	280/100	32MHz	1	0.02	5	5	5	3.0	2.2	0.9	50.91	56.72
E-5240	M-5355	5	8	0.09	0	12	25	560/200	12.5KHz-	5	0.05	0	10	10	9.5	7.0	2.6	50.91	56.72
									3.3MHz										
									15KHz-4MHz										

TURNS RATIO 4:4:4

Pico Part Number		Coupling Circuit Characteristics								D.C. Resistance			Pico Prices 1-9* (US $)	
E Series Insulated Leads	**M Series Thru Hole**	**P Width µSEC.**	**Volt Out**	**Rise Time µSEC.**	**% Over Shoot**	**Droop %**	**% Back Swing**	**Imp in/ out**	**Freq Resp. Within 3db**	**4 tns brn red**	**4 tns or yel**	**4 Turn grn blu**	**E Series**	**M Series**
E-5181	M-5356	0.05	10	0.018	0	0	10	50	150KHz-30MHz	0.21	0.23	0.25	56.44	62.84
E-5182	M-5357	0.1	10	0.02	0	0	5	50	100KHz-17MHz	0.47	0.56	0.67	56.44	62.84
E-5183	M-5358	0.2	8	0.035	0	0	5	100	16KHz-10MHz	1.0	1.25	1.56	56.44	62.84
E-5184	M-5359	0.5	8	0.06	0	0	0	100	7KHz-3.3MHz	1.5	1.80	2.2	56.44	62.84
E-5185	M-5360	1	8	0.15	0	0	5	100	7KHz-2.3MHz	2.5	3.1	3.9	56.44	62.84
E-5186	M-5361	2	8	0.17	0	0	10	100	2.2KHz-1.3MHz	3.0	3.7	4.6	56.44	62.84
E-5187	M-5362	3	8	0.20	0	0	10	100	1.7KHz-1.5MHz	4.9	6.0	7.4	56.44	62.84
E-5188	M-5363	5	8	0.20	0	15	25	200	1.8KHz-1.5MHz	8.0	9.7	11.8	56.44	62.84
E-5189	M-5364	10	8	0.4	0	15	20	200	1.5KHz-1.2MHz	13.0	15.8	19.2	56.44	62.84

Coupling circuit measurements made with (1)BRN - (2)RED as input and (3) or - (4)YEL as output, (5)GRN (6)BLU winding is open: Input Voltage=1V

*Discount Prices:

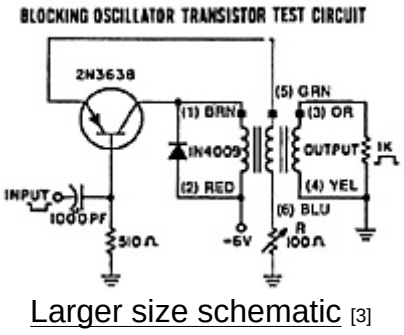
- 1-9 Net;
  10-24 less 10%;
  25-49 less 16%;
  50-99 less 23%;
  100-499 less 30%

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
- Built to Mil-PRF-21038
- Magnetic Shields available
- Electrostatic shielding can be added
- Variation of standard designs available
- 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.



Larger size schematic [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

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