



## Switchmode Transformers High Frequency Gate Drive

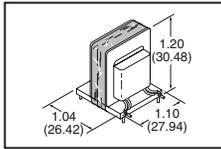


### DESCRIPTION:

TRIAD gate drive transformers are used to isolate the control circuitry from the line-connected switches such as with power supplies. The windings are interleaved for the lowest possible practical leakage inductance. Maximum leakage Inductance: 2.5µH. Features operating frequencies up to 200 kHz.

### TECHNICAL NOTES:

- Hi-Pot tested: 3,750VRMS
- Pin-out: Drive = Pins 1, 2; Gate = Pins 3, 6; Dual Gate = Pins 3, 4 and 5, 6



Maximum DCR Gate (Ω)	Maximum ET Product (VµSec)	Turns Ratio	Minimum Inductance (mH)	Digi-Key Part No.	Price Each					Triad Part No.
					1	10	25	50	100	
350	540	1:1	680	237-1111-ND	17.46	14.14	12.57	11.39	9.67	GDE25-1
650	540	1:1.1	680	237-1112-ND†	17.46	14.14	12.57	11.39	9.67	GDE25-2
350	840	1.5:1	1.50	237-1113-ND	17.46	14.14	12.57	11.39	9.67	GDE25-3
650	840	1.5:1.1	1.50	237-1114-ND†	17.46	14.14	12.57	11.39	9.67	GDE25-4
875	540	1:1.5	680	237-1115-ND	17.46	14.14	12.57	11.39	9.67	GDE25-5
1.75	540	1:1.5:1.5	680	237-1116-ND†	17.46	14.14	12.57	11.39	9.67	GDE25-6

† Dual Secondary Gate

237-1117-ND (GDE25-KIT) - 6 piece kit (one of each)..... \$99.75

## Low Frequency Current Sense Transformer

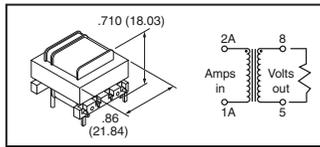


### Description:

Designed to monitor current in low frequency applications. Frequencies from 50Hz - 400Hz, Current from 0.1 to 30 amperes.

### Technical Notes:

- Turns ratio: Primary to sense 1:500 • Suggested burden resistor: 60Ω • Hi-Pot: 2,500 Volts



Primary DCR Maximum (µΩ)	Sense DCR Maximum (Ω)	Typical Output (mV/Amp)	Digi-Key Part No.	Price Each					Triad Part No.
				1	10	25	50	100	
250	21	110	237-1103-ND	3.24	2.63	2.34	2.12		CSE187L

## High Frequency Current Sense Transformer

TRIAD current sense transformers are used to detect the current passing through a conductor.

They are constructed of UL rated 130°C materials.

Frequency Range: 20kHz - 200kHz

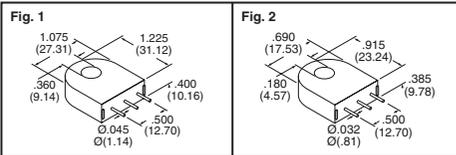


Fig.	Min. Inductance (mH)	ET VµSEC Ref. 20kHz	Pri. (Amps)	Digi-Key Part No.	Price Each					Triad Part No.
					1	10	25	50	100	
1	14.0	2000	110.0 RMS	237-1096-ND	6.86	5.56	4.94	4.48	3.80	CST206-1A
	14.0	2000	110.0 RMS	237-1097-ND†	7.48	6.06	5.39	4.89	4.15	CST206-1T
	56.0	4000	80.0 RMS	237-1098-ND	6.86	5.56	4.94	4.48	3.80	CST206-2A
	130.0	6000	70.0 RMS	237-1100-ND	6.86	5.56	4.94	4.48	3.80	CST206-3A
	130.0	6000	70.0 RMS	237-1101-ND†	7.48	6.06	5.39	4.89	4.15	CST206-3T
2	3.5	500	35.0 RMS	237-1104-ND	4.61	3.74	3.33	3.02	2.56	CST306-1A
	3.5	500	35.0 RMS	237-1105-ND†	5.24	4.25	3.78	3.42	2.90	CST306-1T
	14.0	1000	25.0 RMS	237-1106-ND	4.61	3.74	3.33	3.02	2.56	CST306-2A
	14.0	1000	25.0 RMS	237-1107-ND†	5.24	4.25	3.78	3.42	2.90	CST306-2T
	55.0	2000	25.0 RMS	237-1108-ND	4.61	3.74	3.33	3.02	2.56	CST306-3A
55.0	2000	25.0 RMS	237-1109-ND†	5.24	4.25	3.78	3.42	2.90	CST306-3T	

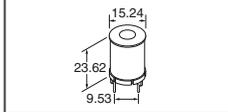
† RoHS Compliant † Center Tapped 3-pin version

237-1110-ND (CST306-KIT) - 6 piece kit (one of each in series CST306) — RoHS Compliant ..... \$24.93

## Switchmode/High Frequency Inductors Rod Core



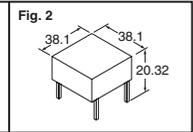
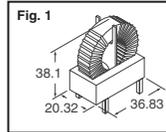
- TRIAD high current rod core inductors provide cost effective energy storage.
- By conditioning the output signal, the inductor smooths out the current waveform to provide a more stable current.
- These low cost inductors are designed to be compatible with automated P.C.B. Installation.



±10% Inductance	DC Rated Current (A)	±15% DC Resistance (Ω)	Lead Diameter Inch (mm)	Digi-Key Part No.	Price Each					Triad Part No.
					1	10	25	50	100	
<b>Rod Core Inductors</b>										
5.6mH	250	6.100	.032 (.81)	237-1165-ND	3.04	2.47	2.20	1.99		RC-1
2.5mH	400	2.450	.032 (.81)	237-1167-ND	3.04	2.47	2.20	1.99		RC-3
1.5mH	500	1.530	.032 (.81)	237-1168-ND	3.04	2.47	2.20	1.99		RC-4
915.0µH	625	1.000	.032 (.81)	237-1169-ND	3.04	2.47	2.20	1.99		RC-5
450.0µH	1,000	.420	.032 (.81)	237-1171-ND	3.04	2.47	2.20	1.99		RC-7
250.0µH	1,250	.210	.032 (.81)	237-1172-ND	3.04	2.47	2.20	1.99		RC-8
200.0µH	1,600	.180	.032 (.81)	237-1173-ND	3.04	2.47	2.20	1.99		RC-9
100.0µH	2,000	.098	.032 (.81)	237-1175-ND	3.04	2.47	2.20	1.99		RC-10
75.0µH	2,500	.070	.032 (.81)	237-1176-ND	3.04	2.47	2.20	1.99		RC-11

237-1177-ND (RC-KIT) 11 piece kit - one of each Rod Core Inductor ..... \$31.17

## Common Mode



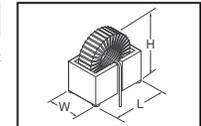
### DESCRIPTION:

- TRIAD common mode EMI suppression inductors are used to eliminate noise common to all lines
- Meeting VDE, IEC, UL and CSA requirements
- Constructed with UL rated 130°C materials
- Hi-Pot Tested: 2,500VRMS

Fig.	Min. Inductance (mH)	Amps R.M.S	Max. DC Resist. (Ω)	Min. Leakage	Pin-Out		Digi-Key Part No.	Price Each				Triad Part No.
					Winding I	Winding II		1	10	25	50	
1	2.00	7.50	.020	25.0µH	1, 2	3, 4	237-1230-ND	5.71	4.63	4.12	3.73	CMT908-V1
	4.00	5.20	.040	45.0µH	1, 2	3, 4	237-1231-ND	5.71	4.63	4.12	3.73	CMT908-V2
	8.00	3.20	.120	90.0µH	1, 2	3, 4	237-1232-ND	5.71	4.63	4.12	3.73	CMT908-V3
	16.00	2.60	.160	180.0µH	1, 2	3, 4	237-1233-ND	5.71	4.63	4.12	3.73	CMT908-V4
2	2.00	7.50	.020	25.0µH	1, 2	3, 4	237-1234-ND	5.71	4.63	4.12	3.73	CMT908-H1
	4.00	5.20	.040	45.0µH	1, 2	3, 4	237-1235-ND	5.71	4.63	4.12	3.73	CMT908-H2
	8.00	3.20	.120	90.0µH	1, 2	3, 4	237-1236-ND	5.71	4.63	4.12	3.73	CMT908-H3
	16.00	2.60	.160	180.0µH	1, 2	3, 4	237-1237-ND	5.71	4.63	4.12	3.73	CMT908-H4

237-1238-ND (CMT908-KIT) 8 piece kit - one of each Encapsulated Toroidal Induct. Series CMT908..... \$39.83

## Toroidal



### DESCRIPTION:

TRIAD toroidal inductors condition the output signal by leveling out the current waveform providing a more stable current supply.

### TECHNICAL NOTES:

- Nominal inductance values are typically 10% higher than minimum rating.
- Biased inductance measured at rated DC amps.

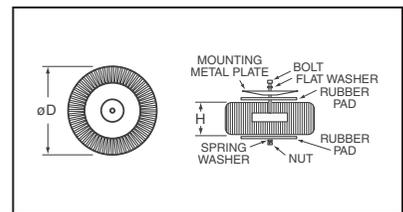
Min. Inductance (µH)	Rated DC (Amps)	Max DCR (mΩ)	Dimensions L x W x H Inch (mm)	Digi-Key Part No.	Price Each				Triad Part No.
					1	10	25	50	
18.85	12.72	2.8	.625 x .350 x .700 (15.88 x 8.89 x 17.78)	237-1178-ND	2.34	1.90	1.69	1.53	FIT44-1
14.75	9.82	3.4		237-1179-ND	2.34	1.90	1.69	1.53	FIT44-2
12.30	7.75	4.0		237-1180-ND	2.34	1.90	1.69	1.53	FIT44-3
8.06	5.22	4.8		237-1181-ND	2.34	1.90	1.69	1.53	FIT44-4
47.40	29.00	2.8	.700 x .475 x .750 (17.78 x 12.06 x 19.05)	237-1182-ND	2.76	2.24	1.99	1.81	FIT50-1
35.48	23.77	3.4		237-1183-ND	2.76	2.24	1.99	1.81	FIT50-2
27.16	16.13	4.0		237-1184-ND	2.76	2.24	1.99	1.81	FIT50-3
21.65	12.27	4.8		237-1185-ND	2.76	2.24	1.99	1.81	FIT50-4
16.76	9.50	5.7	.975 x .625 x 1.100 (24.77 x 15.88 x 27.94)	237-1186-ND	2.76	2.24	1.99	1.81	FIT50-5
12.50	6.75	6.8		237-1187-ND	2.76	2.24	1.99	1.81	FIT50-6
8.86	4.80	8.1		237-1188-ND	2.76	2.24	1.99	1.81	FIT50-7
89.50	57.99	2.8		237-1189-ND	3.35	2.71	2.41	2.19	FIT68-1
71.10	41.59	3.4	237-1190-ND	3.35	2.71	2.41	2.19	FIT68-2	
54.81	33.05	4.0	.875 x .475 x .950 (22.23 x 12.06 x 24.13)	237-1191-ND	3.35	2.71	2.41	2.19	FIT68-3
43.30	26.63	4.8		237-1192-ND	3.35	2.71	2.41	2.19	FIT68-4
33.15	18.79	5.7		237-1193-ND	3.35	2.71	2.41	2.19	FIT68-5
24.31	13.56	6.8		237-1194-ND	3.35	2.71	2.41	2.19	FIT68-6
18.64	10.23	8.1	237-1195-ND	3.35	2.71	2.41	2.19	FIT68-7	
128.00	74.04	4.0	1.300 x .725 x 1.400 (33.02 x 18.42 x 35.56)	237-1196-ND	4.15	3.36	2.99	2.71	FIT80-1
107.50	58.05	4.8		237-1197-ND	4.15	3.36	2.99	2.71	FIT80-2
65.04	31.60	6.8		237-1199-ND	4.15	3.36	2.99	2.71	FIT80-4
38.07	18.11	9.7		237-1201-ND	4.15	3.36	2.99	2.71	FIT80-6
253.00	153.00	4.0	1.300 x .725 x 1.400 (33.02 x 18.42 x 35.56)	237-1202-ND	5.15	4.18	3.71	3.37	FIT106-1
154.00	84.00	5.7		237-1205-ND	5.15	4.18	3.71	3.37	FIT106-3
116.00	61.90	6.8		237-1206-ND	5.15	4.18	3.71	3.37	FIT106-4
70.05	35.30	9.7		237-1208-ND	5.15	4.18	3.71	3.37	FIT106-6

237-1209-ND (FIT-KIT) 30 piece kit - one of each Toroidal Inductor — RoHS Compliant ..... \$99.58

## NEW! Power Transformers



TRIAD toroidal chassis mount World Series transformers are designed to meet most International Safety Agencies. The toroidal construction inherently helps reduce stray fields, increases efficiency and minimizes size compared to traditional EL transformers. These transformers are constructed with UL approved insulation system rated for 130°C. The primary and secondary are both electrically isolated from each other, and from the core itself. Toroidal chassis mount World Series transformers are available in sizes ranging from 25VA to 1000VA, and are equipped with generous insulated leads for connections.



VA	Secondary		Dimensions (mm)		Digi-Key Part No.	Price Each				Triad Part No.
	Series	Parallel	øD	H		1	10	25	50	
25	12V CT @ 2.08A	6.0V @ 4.16A	71	32	237-1322-ND	22.08	18.78	15.47		VPT18-2080
25	18V CT @ 1.39A	9.0V @ 2.78A	71	32	237-1323-ND	22.08	18.78	15.47		VPT18-1390
25	24V CT @ 1									