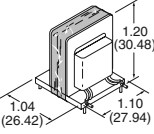


Switchmode Transformers High Frequency Gate Drive



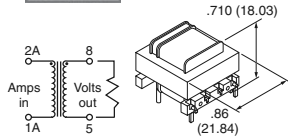
DESCRIPTION: TRIAD gate drive transformers are used to isolate the control circuitry from the line-connected switches such as with power supplies. The windings are interleaved for the lowest possible practical leakage inductance. Maximum leakage inductance: 2.5 µH. Features operating frequencies up to 200 kHz. **TECHNICAL NOTES:** • Hi-Pot tested: 3.750VRMS • Pin-out: Drive = Pins 1, 2. Gate = Pins 3, 6 and Dual Gate = Pins 3, 4, 5, 6

Maximum DCR Gate (Ω)	Maximum ET Product (VpSec)	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	11.30	9.15	8.14	7.37	6.26	GDE25-1
.650	540	1:1.1	.680	237-1112-ND†	11.30	9.15	8.14	7.37	6.26	GDE25-2
.350	840	1.5:1	1.50	237-1113-ND	11.30	9.15	8.14	7.37	6.26	GDE25-3
.650	840	1.5:1.1	1.50	237-1114-ND†	11.30	9.15	8.14	7.37	6.26	GDE25-4
.875	540	1:1.5	.680	237-1115-ND	11.30	9.15	8.14	7.37	6.26	GDE25-5
1.75	540	1:1.5:1.5	.680	237-1116-ND†	11.30	9.15	8.14	7.37	6.26	GDE25-6

† Dual Secondary Gate

237-1117-ND (GDE25-KIT) - 6 piece kit (one of each)..... 64.53

Low Frequency Current Sense Transformer



Description: Designed to monitor current in low frequency applications. Frequencies from 50Hz - 400Hz, Current from .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	2.10	1.70	1.51	1.37		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

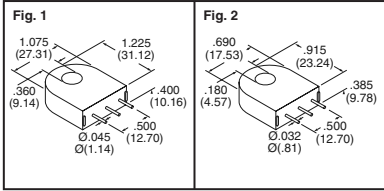


Fig.	Min. Ind. (mH)	ET VpSEC Ref 20kHz	Pri. (Amps)	Digi-Key Part No.	Price Each					Triad Part No.
					1	10	25	50	100	
1	14.0	2000	110.0 RMS	237-1096-ND◆	4.44	3.60	3.20	2.90	2.46	CST206-1A
	14.0	2000	110.0 RMS	237-1097-ND◆	4.84	3.92	3.49	3.16	2.68	CST206-1T*
	56.0	4000	80.0 RMS	237-1098-ND◆	4.44	3.60	3.20	2.90	2.46	CST206-2A
	56.0	4000	80.0 RMS	237-1099-ND◆	4.84	3.92	3.49	3.16	2.68	CST206-2T*
	130.0	6000	70.0 RMS	237-1100-ND◆	4.44	3.60	3.20	2.90	2.46	CST206-3A
	130.0	6000	70.0 RMS	237-1101-ND◆	4.84	3.92	3.49	3.16	2.68	CST206-3T*
2	3.5	500	35.0 RMS	237-1104-ND◆	2.98	2.42	2.15	1.95	1.66	CST306-1A
	3.5	500	35.0 RMS	237-1105-ND◆	3.39	2.75	2.44	2.22	1.88	CST306-1T*
	14.0	1000	25.0 RMS	237-1106-ND◆	2.98	2.42	2.15	1.95	1.66	CST306-2A
	14.0	1000	25.0 RMS	237-1107-ND◆	3.39	2.75	2.44	2.22	1.88	CST306-2T*
	55.0	2000	25.0 RMS	237-1108-ND◆	2.98	2.42	2.15	1.95	1.66	CST306-3A
	55.0	2000	25.0 RMS	237-1109-ND◆	3.39	2.75	2.44	2.22	1.88	CST306-3T*

◆ RoHS Compliant † T Suffix = Center Tapped 3-pin version

237-1102-ND (CST206-KIT) - 6 piece kit (one of each in series CST206) — RoHS Compliant 24.18

237-1110-ND (CST306-KIT) - 6 piece kit (one of each in series CST306) — RoHS Compliant 16.13

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.

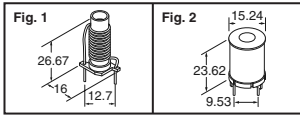


Fig.	±15% Induct. (µH)	DC Rated Current (A)	Maximum DC Resist. (mΩ)	Lead Diameter Inch (mm)	Digi-Key Part No.	Price Each					Triad Part No.
						1	10	25	50	100	
High Current Rod Core Inductors											
1	2.54	11.60	5.50	.050 (1.27)	237-1158-ND	1.77	1.44	1.28	1.16		FIRCH-1
	3.60	8.10	9.95	.040 (1.02)	237-1160-ND	1.77	1.44	1.28	1.16		FIRCH-3
	5.90	5.70	18.50	.032 (.81)	237-1162-ND	1.77	1.44	1.28	1.16		FIRCH-5
	7.22	4.80	26.10	.028 (.71)	237-1163-ND	1.77	1.44	1.28	1.16		FIRCH-6

Fig.	10% Induct.	DC Rated Current (A)	±15% DC Resist. (Ω)	Lead Diameter Inch (mm)	Digi-Key Part No.	Price Each					Triad Part No.
						1	10	25	50	100	
Rod Core Inductors											
2	5.6mH	.250	6.100		237-1165-ND◆	1.97	1.60	1.42	1.29		RC-1
	3.9mH	.320	3.900		237-1166-ND◆	1.97	1.60	1.42	1.29		RC-2
	2.5mH	.400	2.450		237-1167-ND◆	1.97	1.60	1.42	1.29		RC-3
	1.5mH	.500	1.530		237-1168-ND◆	1.97	1.60	1.42	1.29		RC-4
	915.0µH	.625	1.000		237-1169-ND◆	1.97	1.60	1.42	1.29		RC-5
	560.0µH	.800	.600		237-1170-ND◆	1.97	1.60	1.42	1.29		RC-6
	250.0µH	1.000	.420	.032 (.81)	237-1171-ND◆	1.97	1.60	1.42	1.29		RC-7
	250.0µH	1.250	.210		237-1172-ND◆	1.97	1.60	1.42	1.29		RC-8
	200.0µH	1.600	.180		237-1173-ND◆	1.97	1.60	1.42	1.29		RC-9
	100.0µH	2.000	.098		237-1175-ND◆	1.97	1.60	1.42	1.29		RC-10
	75.0µH	2.500	.070		237-1176-ND◆	1.97	1.60	1.42	1.29		RC-11

◆ RoHS Compliant

237-1177-ND (RC-KIT) 11 piece kit - one of each Rod Core Inductor — RoHS Compliant 20.17

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

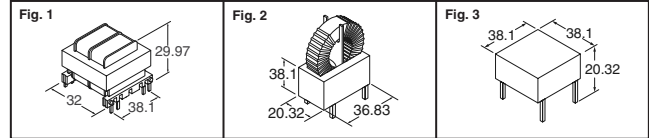


Fig.	Min. Induct. (mH)	Amps. R.M.S.	Max. DC Resist. (Ω)	Min. Leakage	Pin-Out Winding I	Winding II	Digi-Key Part No.	Price Each					Triad Part No.
								1	10	25	50	100	
E-Core Inductors													
1	4.4	5.500	.049	45.0µH	1 & 6	7 & 12	237-1210-ND	4.92	3.99	3.55	3.22		CME375-1
	17.8	2.700	.196	180.0µH			237-1213-ND	4.92	3.99	3.55	3.22		CME375-4
	28.6	2.200	.316	300.0µH			237-1214-ND	4.92	3.99	3.55	3.22		CME375-5
	43.6	1.750	.489	440.0µH			237-1215-ND	4.92	3.99	3.55	3.22		CME375-6
	70.3	1.380	.785	720.0µH			237-1216-ND	4.92	3.99	3.55	3.22		CME375-7
	111.6	1.100	1.240	1.1mH			237-1217-ND◆	4.92	3.99	3.55	3.22		CME375-8
	176.1	0.870	1.980	1.8mH			237-1218-ND	4.92	3.99	3.55	3.22		CME375-9
Encapsulated Toroidal Inductors — RoHS Compliant													
2	2.00	7.50	.020	25.0µH	1 & 2	3 & 4	237-1230-ND	3.47	2.81	2.50	2.27		CMT908-V1
	4.00	5.20	.040	45.0µH			237-1231-ND	3.47	2.81	2.50	2.27		CMT908-V2
	8.00	3.20	.120	90.0µH			237-1232-ND	3.47	2.81	2.50	2.27		CMT908-V3
3	2.00	7.50	.020	25.0µH	1 & 2	3 & 4	237-1234-ND	3.47	2.81	2.50	2.27		CMT908-H1
	4.00	5.20	.040	45.0µH			237-1235-ND	3.47	2.81	2.50	2.27		CMT908-H2
	8.00	3.20	.120	90.0µH			237-1236-ND	3.47	2.81	2.50	2.27		CMT908-H3
4	2.00	7.50	.020	25.0µH			237-1237-ND	3.47	2.81	2.50	2.27		CMT908-H4

◆ RoHS Compliant

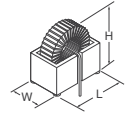
237-1238-ND (CMT908-KIT) 8 piece kit - one of each Encapsulated Toroidal Ind. Series CMT908 — RoHS Compliant 24.20

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. Induct. (µH)	Rated DC No Bias At Bias	Max DCR (mΩ)	Dims. - Inch (mm) L x W x H	Digi-Key Part No.	Price Each					Triad Part No.
					1	10	25	50	100	
18.85	12.72	2.8	44.8	237-1178-ND◆	1.42	1.15	1.03	.93		FIT44-1
14.75	9.82	3.4	30.7	237-1179-ND◆	1.42	1.15	1.03	.93		FIT44-2
12.90	7.75	4.0	23.4	237-1180-ND◆	1.42	1.15	1.03	.93		FIT44-3
8.06	5.22	4.8	15.9	237-1181-ND◆	1.42	1.15	1.03	.93		FIT44-4
47.40	29.00	2.8	78.9	237-1182-ND◆	1.68	1.36	1.21	1.10		FIT50-1
35.48	23.77	3.4	57.8	237-1183-ND◆	1.68	1.36	1.21	1.10		FIT50-2
27.16	16.13	4.0	40.1	237-1184-ND◆	1.68	1.36	1.21	1.10		FIT50-3
21.65	12.27	4.8	29.2	237-1185-ND◆	1.68	1.36	1.21	1.10		FIT50-4
16.76	9.50	5.7	20.0	237-1186-ND◆	1.68	1.36	1.21	1.10		FIT50-5
12.50	6.75	6.8	14.0	237-1187-ND◆	1.68	1.36	1.21	1.10		FIT50-6
8.86	4.80	8.1	11.0	237-1188-ND◆	1.68	1.36	1.21	1.10		FIT50-7
89.50	57.99	2.8	108.0	237-1189-ND◆	2.03	1.65	1.47	1.33		FIT68-1
71.10	41.59	3.4	86.1	237-1190-ND◆	2.03	1.65	1.47	1.33		FIT68-2
54.81	33.05	4.0	59.9	237-1191-ND◆	2.03	1.65	1.47	1.33		FIT68-3
43.30	26.63	4.8	42.4	237-1192-ND◆	2.03	1.65	1.47	1.33		FIT68-4
33.15	18.79	5.7	28.8	237-1193-ND◆	2.03	1.65	1.47	1.33		FIT68-5
24.31	13.56	6.8	20.2	237-1194-ND◆	2.03	1.65	1.47	1.33		FIT68-6
18.64	10.23	8.1	14.8	237-1195-ND◆	2.03	1.65	1.47	1.33		FIT68-7
128.00	74.04	4.0	95.2	237-1196-ND◆	2.52	2.04	1.82	1.65		FIT80-1
107.50	58.05	4.8	67.9	237-1197-ND◆	2.52	2.04	1.82	1.65		