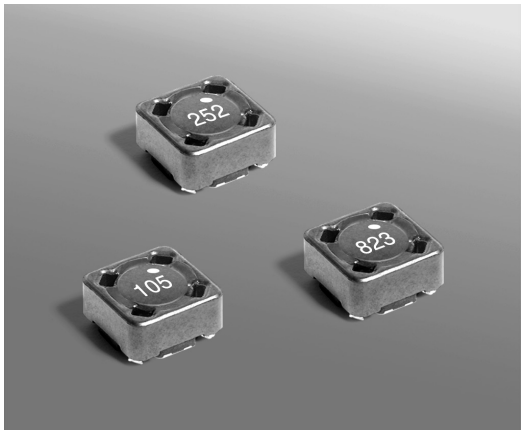
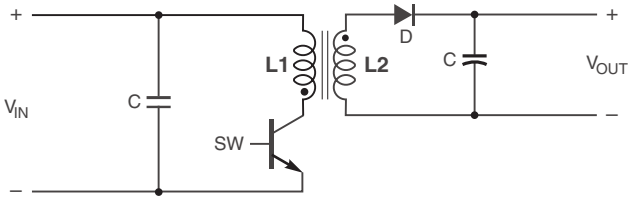
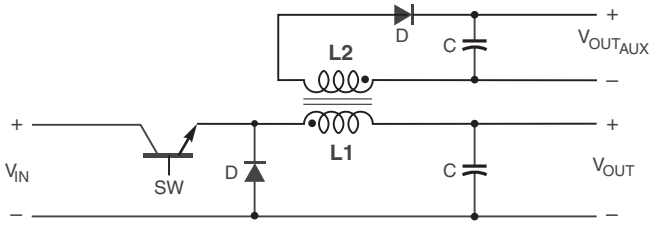
Shielded Coupled Inductors



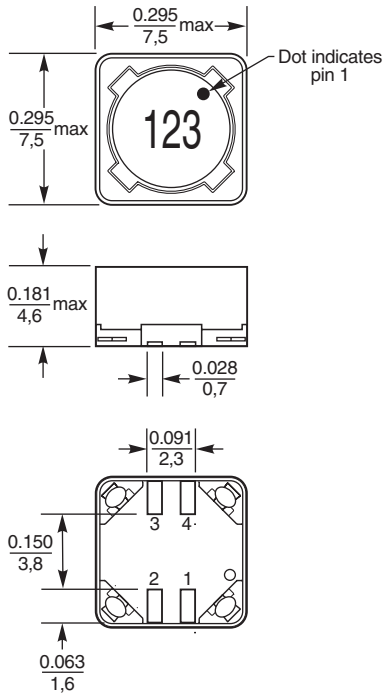
- Factor of coupling (k≥0.97)
- Hipot 200 V between windings.
- Use in a variety of circuits including flyback, multi-output buck.
- They provide high inductance, high efficiency and excellent current handling in a rugged, low cost part.
- Can also be used as two single inductors connected in series or parallel, as a common mode choke or as a 1 : 1 transformer.
- ROHS compliant.



Typical Flyback Converter

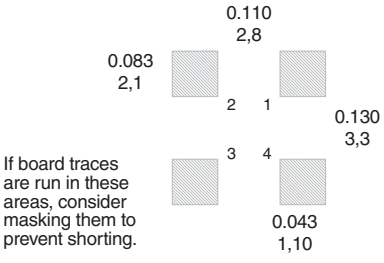


Typical Buck Converter with auxiliary output



Dimensions are in $\frac{\text{inches}}{\text{mm}}$

Recommended Land Pattern



If board traces are run in these areas, consider masking them to prevent shorting.

Shielded Coupled Inductors

Part number	Inductance ±20% (µH)	DCR max (Ohms)	SRF typ (MHz)	Coupling coefficient typ	Leakage L typ (µH)	Isat (A) 10% drop	Isat (A) 20% drop	Isat (A) 30% drop	Irms (A) both windings	Irms (A) one winding
YETSD7342-252MT	2.5	0.033	55	0.97	0.14	6.0	6.2	6.3	2.17	3.06
YETSD7342-332MT	3.3	0.037	43	0.99	0.09	5.2	5.3	5.4	2.05	2.89
YETSD7342-472MT	4.7	0.051	35	0.99	0.11	4.1	4.3	4.6	1.74	2.46
YETSD7342-562MT	5.6	0.063	32	0.99	0.09	3.9	4.1	4.2	1.57	2.22
YETSD7342-682MT	6.8	0.070	30	0.99	0.14	3.7	3.8	3.9	1.49	2.10
YETSD7342-822MT	8.2	0.075	27	0.98	0.25	3.3	3.4	3.5	1.44	2.03
YETSD7342-103MT	10	0.100	22	0.98	0.30	2.8	2.9	3.0	1.24	1.76
YETSD7342-123MT	12	0.120	20	0.98	0.36	2.5	2.6	2.7	1.14	1.61
YETSD7342-153MT	15	0.130	18	0.98	0.49	2.2	2.3	2.4	1.09	1.54
YETSD7342-183MT	18	0.170	15	>0.99	0.16	2.0	2.2	2.3	0.95	1.35
YETSD7342-223MT	22	0.220	13.5	>0.99	0.20	1.9	2.0	2.1	0.84	1.19
YETSD7342-273MT	27	0.250	12.0	>0.99	0.20	1.7	1.8	1.9	0.79	1.11
YETSD7342-333MT	33	0.270	11.0	>0.99	0.15	1.5	1.6	1.7	0.76	1.07
YETSD7342-393MT	39	0.380	10.0	0.99	0.70	1.3	1.4	1.5	0.64	0.90
YETSD7342-473MT	47	0.420	9.5	>0.99	0.30	1.2	1.3	1.4	0.61	0.86
YETSD7342-563MT	56	0.460	8.7	>0.99	0.51	1.1	1.2	1.3	0.58	0.82
YETSD7342-683MT	68	0.600	7.3	>0.99	0.51	1.0	1.1	1.2	0.51	0.72
YETSD7342-823MT	82	0.680	6.2	0.99	1.17	0.90	1.00	1.1	0.48	0.67
YETSD7342-104MT	100	0.770	5.5	>0.99	0.96	0.80	0.92	0.98	0.45	0.63
YETSD7342-124MT	120	1.03	4.5	>0.99	0.61	0.70	0.80	0.90	0.39	0.55
YETSD7342-154MT	150	1.35	4.0	>0.99	0.54	0.65	0.76	0.80	0.34	0.48
YETSD7342-224MT	220	1.72	3.5	>0.99	1.43	0.59	0.62	0.66	0.30	0.42
YETSD7342-334MT	330	2.70	3.0	>0.99	1.65	0.49	0.52	0.54	0.24	0.34
YETSD7342-474MT	470	4.00	2.6	0.99	5.50	0.41	0.43	0.46	0.20	0.28

1. When ordering, please specify packaging codes:

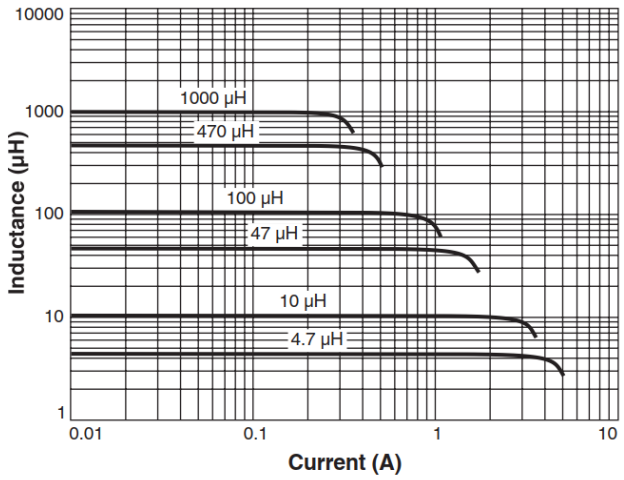
YETSD7342-105MT

Packaging: **T** = 13″ machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (1000 parts per full reel).
B = In bulk or less than full reel.

2. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an HP 4284A LCR meter or equivalent.
3. DCR is for each winding.
4. SRF measured using an HP 4191A or equivalent.
5. Leakage inductance is for L1 and is measured with L2 shorted.
6. Irms is for that causes a 40°C temperature rise from 25°C ambient when applied to each winding simultaneously .

- Core material Ferrite
- Ambient temperature –40°C to +85°C with (40°C rise) Irms current. • Maximum part temperature +125°C (ambient + temp rise).
- Storage temperature Component: –40°C to +125°C. Tape and reel packaging: –40°C to +80°C
- Winding to winding isolation 200 Vrms, one minute
- Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Typical L vs Current



Typical L vs Frequency