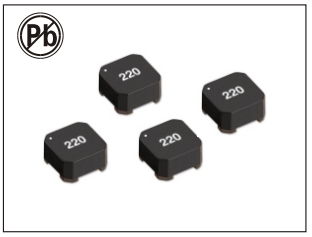
COUPLED INDUCTORS,COMMON MODE CHOKES
SDRH6235D SERIES



FEATURES:

- Only 3.5 mm high and 6.0 mm square
- Ideal for use in flyback, multi–output buck, SEPIC and Zeta applications
- High inductance, high efficiency and excellent current handling
- Can also be used as two single inductors connected in series or parallel or as a common mode choke
- AEC–Q200 Grade 1 (40℃ to +125℃)

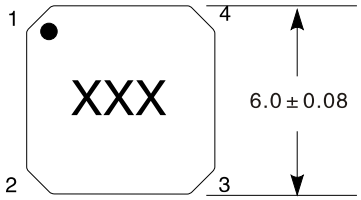
ELECTRICAL CHARACTERISTICS:

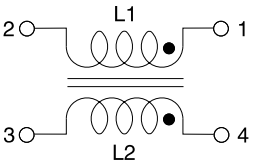
Part number SDRH6235D–	Inductance ±20% (uH)	DCR max (Ohms)	SRF typ (Mhz)	Coupling coefficient typ	Leakage L typ (uH)	Isat (A)			Irms (A)	
						10% drop	20% drop	30% drop	both windings	one windings
6R8M	6.8	0.120	31	0.99	0.10	2.80	3.00	3.12	1.40	1.98
100M	10	0.157	26	0.99	0.12	2.50	2.70	2.80	1.30	1.83
220M	22	0.300	15	>0.99	0.15	1.50	1.67	1.73	0.85	1.20
470M	47	0.620	9.7	>0.99	0.21	0.90	0.98	0.99	0.60	0.85
101M	100	1.20	7.0	>0.99	0.45	0.62	0.72	0.74	0.40	0.56
471M	470	3.50	3.0	>0.99	0.61	0.18	0.22	0.23	0.25	0.35
102M	1000	7.00	1.9	>0.99	1.05	0.12	0.14	0.15	0.15	0.21
152M	1500	10.8	1.5	>0.99	1.70	0.12	0.12	0.13	0.14	0.20
202M	2000	16.0	1.3	>0.99	2.10	0.08	0.11	0.12	0.11	0.16

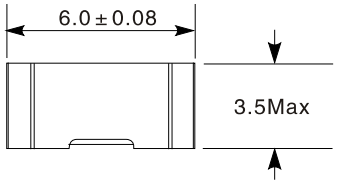
1. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent. When leads are connected in parallel, inductance is the same value. When leads are connected in series, inductance is four times the value
2. DCR is for each winding. When leads are connected in parallel, DCR is half the value. When leads are connected in series, DCR is twice the value
3. SRF measured using an Agilent/HP 4191A or equivalent. When leads are connected in parallel, SRF is the same value
4. Leakage Inductance is for L1 and is measured with L2 shorted
5. DC current at 25 ℃ that causes the specified inductance drop from its value without current. It is the sum of the current flowing in both windings
6. Equal current when applied to each winding simultaneously that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
7. Maximum current when applied to one winding that causes a 40 ℃ temperature rise from 25 ℃ ambient. This information is for reference only and does not represent absolute maximum ratings
8. Electrical specifications at 25 ℃
9. Ambient temperature –40 ℃ to +125 ℃ with (40 ℃ rise) Irms current
10. Maximum part temperature +165 ℃ (ambient + temp rise)
11. Storage temperature Component: –40 ℃ to +165 ℃
12. Tape and reel packaging: –40 ℃ to +80 ℃
13. Winding to winding isolation 100 Vrms, one minute
14. Resistance to soldering heat Max three 40 second reflows at +260 ℃ , parts cooled to room temperature between cycles
15. Packaging 1000/7″ reel; 3500/13″ reel

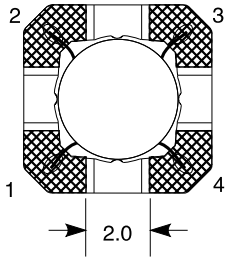
PHYSICAL CHARACTERISTICS & WINDING:

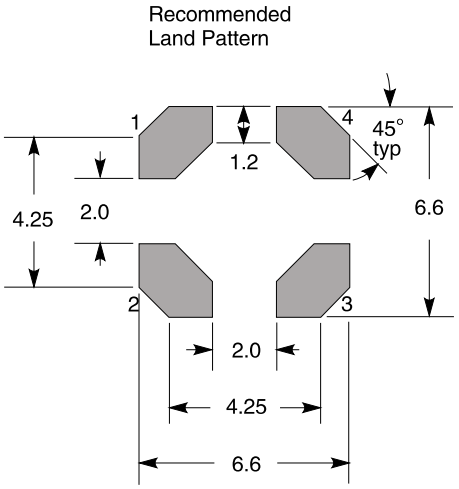
Dimensions are in mm

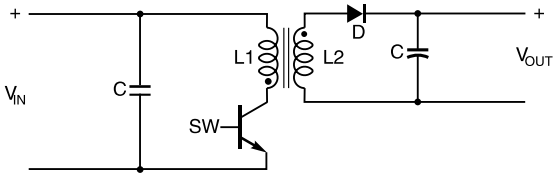




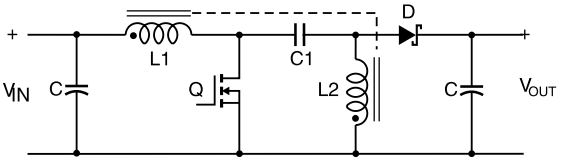




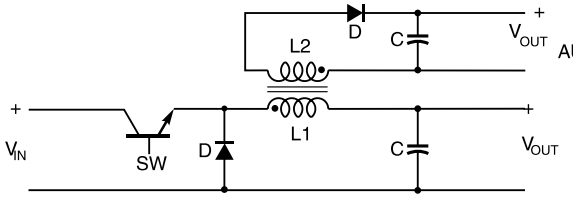




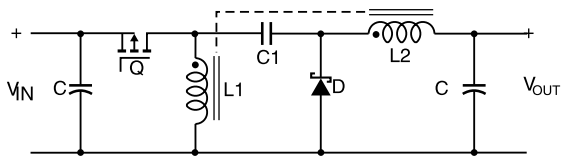
Typical Flyback Converter



Typical SEPIC schematic



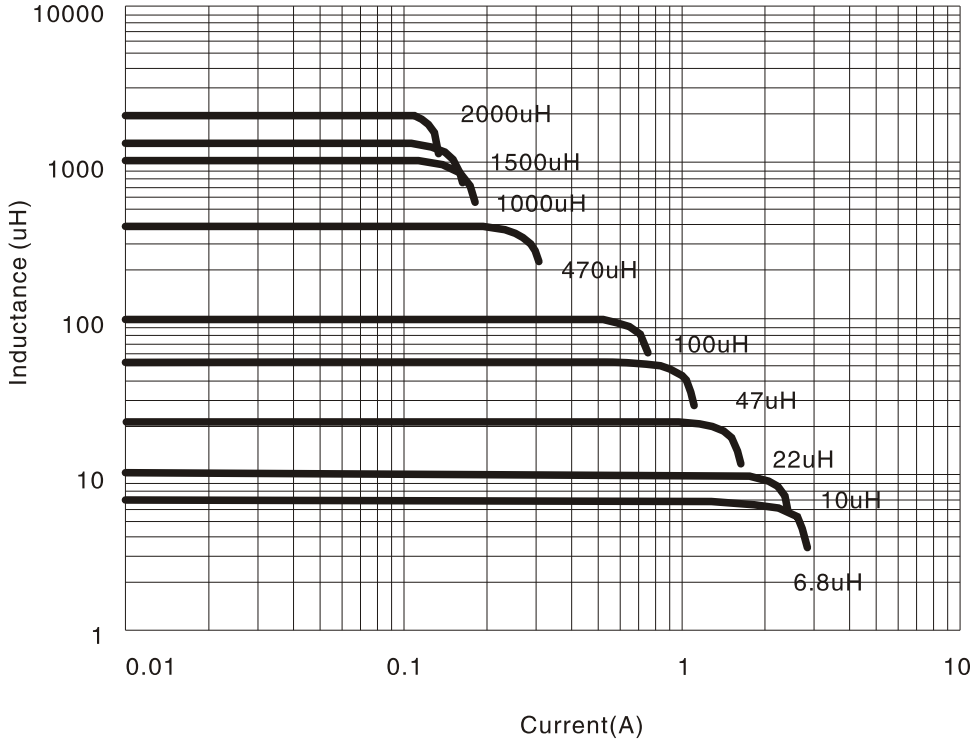
Typical Buck Converter with auxiliary output



Typical Zeta schematic

PERFORMANCE CURVE:

TYPICAL L VS CURRENT



TYPICAL L VS FREQUENCY