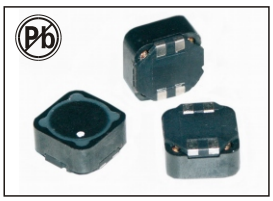


DUAL WINDING,SHIELDING INDUCTORS

SDRH1205D SERIES

Description:

- Four sizes of shielded drum core inductors
- Windings can be connected in series or parallel offering a broadrange of inductance and current ratings
- Surface Mount

Packaging:

- Supplied in tape and reel packaging 1350 (DRQ73),1100 (DRQ74) 600 (DRQ125),and 350 (DRQ127) per reel

Applications:

- As a transformer: SEPIC,flyback
- As an inductor:buck,boost,coupled inductor
- DC–DC converters
- VRM inductor for CPU and DDR power supplies
- Input and output filter chokes

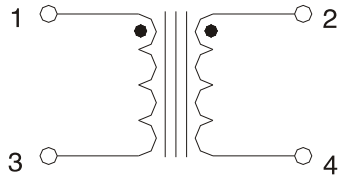
ELECTRICAL CHARACTERISTICS:

Part Number	Rated Inductance (uH)	Parallel ratings					Series ratings				
		OCL ① ±20% (uH)	Irms ② (A)	Isat ③ (A)	DCR ④ (Ω)	Volt ⑤ u–sec	OCL ① ±20% (uH)	Irms ② (A)	Isat ③ (A)	DCR ④ (Ω)	Volt ⑤ u–sec
SDRH1205D–R47M	0.47	0.456	17.6	33.0	0.0018	3.17	1.824	8.80	16.5	0.0078	6.34
SDRH1205D–1R0M	1.0	0.894	15.0	23.6	0.0024	4.43	3.576	7.51	11.8	0.0096	8.86
SDRH1205D–1R5M	1.5	1.478	13.8	18.3	0.0029	5.70	5.912	6.89	9.15	0.0114	11.40
SDRH1205D–2R2M	2.2	2.208	10.9	15.0	0.0045	6.97	8.832	5.46	7.50	0.0182	13.9
SDRH1205D–3R3M	3.3	3.084	9.26	12.7	0.0063	8.23	12.34	4.63	6.35	0.0253	16.5
SDRH1205D–4R7M	4.7	5.274	7.18	9.71	0.0105	10.8	21.10	3.59	4.86	0.0420	21.6
SDRH1205D–6R8M	6.8	6.588	6.64	8.68	0.0123	12.0	26.35	3.32	4.34	0.0492	24.0
SDRH1205D–8R2M	8.2	8.048	5.54	7.86	0.0176	13.3	32.19	2.77	3.93	0.0705	26.6
SDRH1205D–100M	10	9.654	5.35	7.17	0.0189	14.6	38.62	2.67	3.59	0.0757	29.2
SDRH1205D–150M	15	15.35	4.27	5.69	0.0298	18.4	61.40	2.13	2.85	0.0120	36.8
SDRH1205D–220M	22	22.36	3.70	4.71	0.0396	22.2	89.44	1.84	2.36	0.159	44.4
SDRH1205D–330M	33	33.74	3.28	3.84	0.0505	27.2	135.0	1.64	1.92	0.203	54.4
SDRH1205D–470M	47	47.47	2.71	3.24	0.0740	32.3	189.9	1.35	1.62	0.297	64.6
SDRH1205D–680M	68	67.91	2.22	2.70	0.101	38.6	271.6	1.11	1.35	0.440	77.2
SDRH1205D–820M	82	86.89	2.05	2.39	0.128	43.7	347.6	1.03	1.20	0.515	87.4
SDRH1205D–101M	100	102.7	1.78	2.20	0.170	47.5	410.8	0.892	1.10	0.682	95.0
SDRH1205D–151M	150	151.1	1.48	1.81	0.248	57.6	604.4	0.739	0.905	0.991	115.2
SDRH1205D–221M	220	216.8	1.19	1.51	0.384	69.0	867.2	0.594	0.755	1.54	138
SDRH1205D–331M	330	332.6	1.06	1.22	0.482	85.5	1330	0.530	0.610	1.93	171
SDRH1205D–471M	470	473.1	0.87	1.02	0.718	102	1892	0.434	0.510	2.87	204
SDRH1205D–681M	680	679.8	0.70	0.85	1.10	122	2719	0.350	0.425	4.42	244
SDRH1205D–821M	820	828.0	0.60	0.77	1.49	135	3312	0.301	0.385	5.96	270
SDRH1205D–102M	1000	1008	0.57	0.70	1.69	149	4032	0.283	0.350	6.76	298

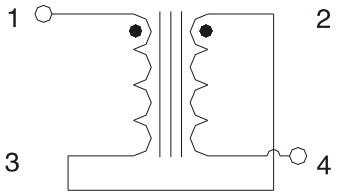
1) Open Circuit Inductance Test Parameters:100kHz,0.25 Vrms,0.0 Adc Parallel:(1,2 –4,3) Series:(1–4) tie (2–3)
2) RMS current for an approximate DT of 40℃ without core loss. It is recommended that the temperature of the part not exceed 125℃.
3) Peak current for approximately 30% roll–off at 20℃
4) DCR limits @ 20℃
5) Applied Volt–Time product (V– μ S) across the inductor. This value represents the applied V– μ Sat 100KHz necessary to generate a core loss equal to 10% of the total losses for a 40° Ctemperature rise.

SCHEMATIC

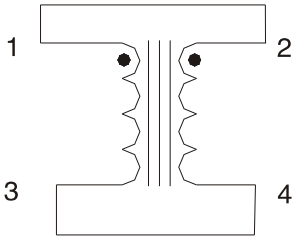
Dual inductor



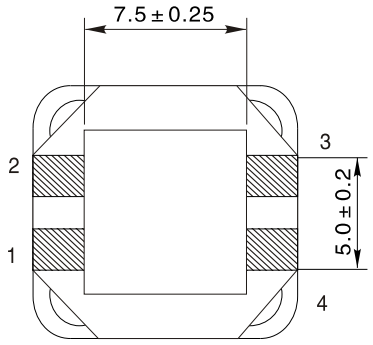
Series Mode

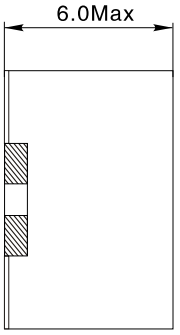


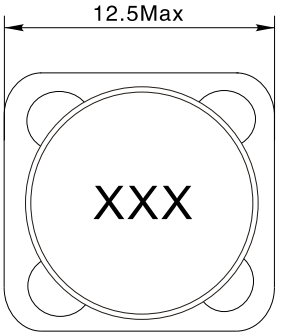
Parallel Mode

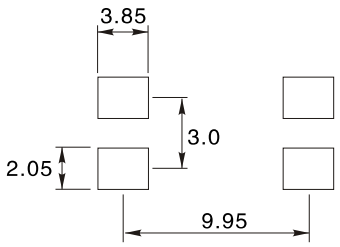


PHYSICAL CHARACTERISTICS(Dimensions:mm)









Recommended Land Pattern

Notes:

1.200Vac Isolation between windings

2.Storage temperature:–40℃ to +125℃

3.Operating temperature:–40℃ to +125℃ (range is application specific).

4.Solderreflow temperature:260℃ max. for 10 seconds max.

5.Turns Ratio (1:3):(2–4)=1:1

6. All specifications subject to change without notice.