

# SMD COUPLED INDUCTORS

## SDRH5228D SERIES



### FEATURES:

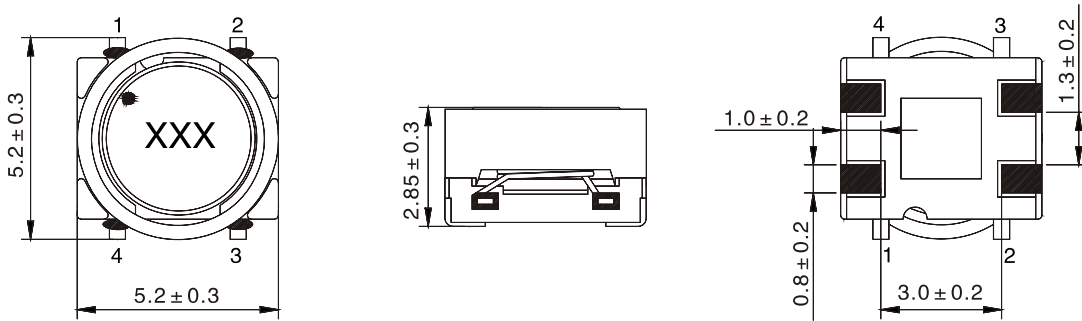
- 5.2X5.2 mm footprint, 2.85mm high coupled inductors.
- Low DCR and excellent current handling.
- They can be used as two single inductors connected in parallel, as a 1 : 1 transformer or as an autotransformer when connected in series.
- Winding to winding isolation (hipot) up to 2500 VDC.

### ELECTRICAL CHARACTERISTICS:

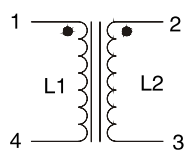
Part Number	L (uH) ± 20%	DCR (Ω) Max	SRF (MHz) Typ	Coupling Coefficient Typ	Isat(A) Typ			Irms(A) Typ	
					10% Drop	20% Drop	30% Drop	Both winding	One winding
SDRH5228D-100M	10	0.3	28.0	0.99	1.2	1.3	1.4	0.682	0.964
SDRH5228D-220M	22	0.65	18.0	0.99	0.78	0.87	0.95	0.438	0.619
SDRH5228D-330M	33	0.95	15.0	0.99	0.64	0.71	0.78	0.341	0.482
SDRH5228D-680M	68	1.8	11.0	0.99	0.45	0.5	0.54	0.255	0.361
SDRH5228D-101M	100	2.65	10.0	0.99	0.37	0.41	0.45	0.205	0.29
SDRH5228D-151M	150	4.3	6.7	1.00	0.3	0.33	0.36	0.155	0.219
SDRH5228D-221M	220	6.1	5.8	1.00	0.25	0.28	0.3	0.14	0.198

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/HP4294A network analyzer or equivalent. When leads are connected in parallel, SRF is the same value.
4. Isat: DC current, at which the inductance drops the specified amount from its value without current. It is the sum of the current flowing in both windings.
5. Irms, both windings: Equal current when applied to each winding simultaneously that causes a 40 °C temperature rise from 25 °C ambient.
6. Irms, one winding: Maximum current when applied to one winding that causes a 40 °C temperature rise from 25 °C ambient.
7. Ambient temperature -40 °C to +85 °C with (40 °C rise) Irms current. Maximum part temperature +125 °C (ambient + temp rise).
8. Storage temperature Component: -40 °C to +125 °C .
9. Tape and reel packaging: -40 °C to +80 °C
10. Winding to winding isolation (hipot) 2500 VDC
11. Resistance to soldering heat Three reflows at >217 °C for 90 seconds (+260 °C ± 5 °C for 20-40 seconds)

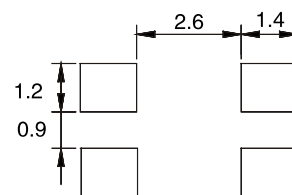
### PHYSICAL CHARACTERISTICS & WINDING:



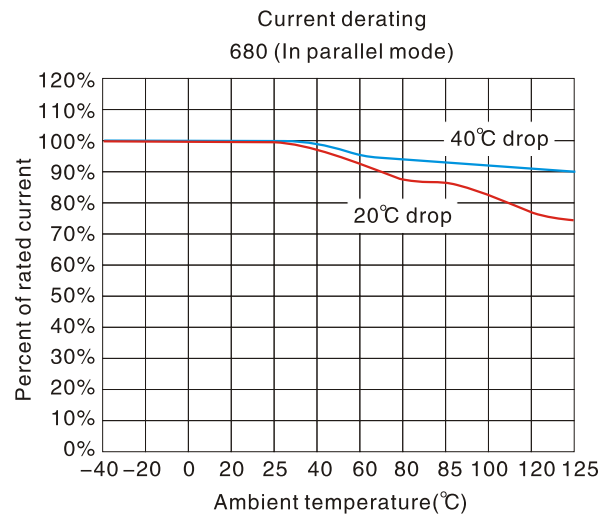
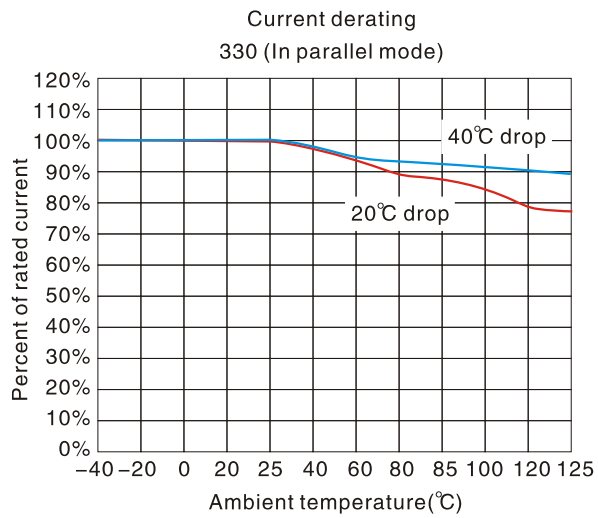
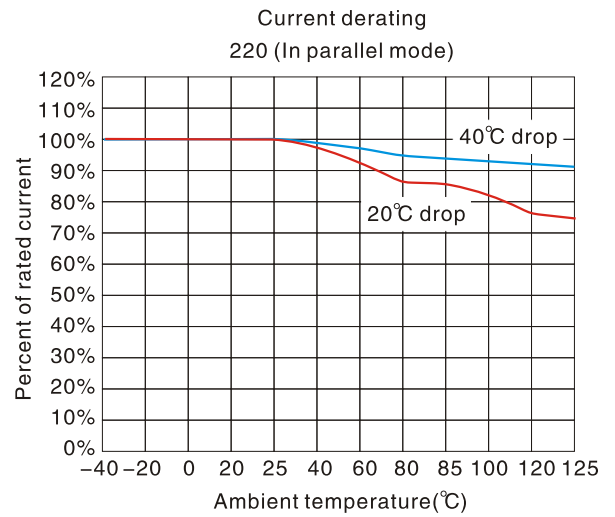
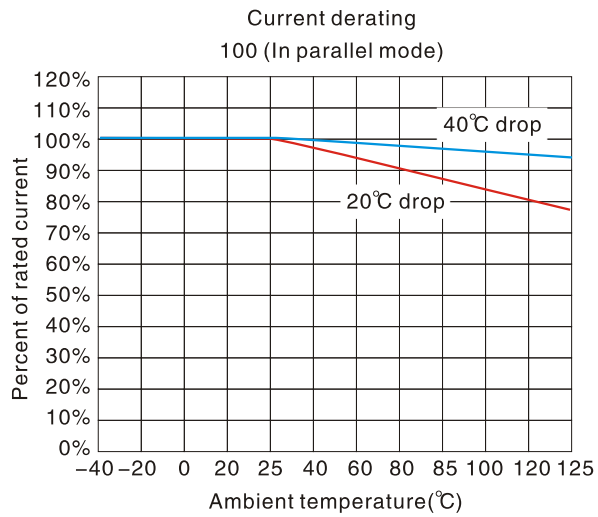
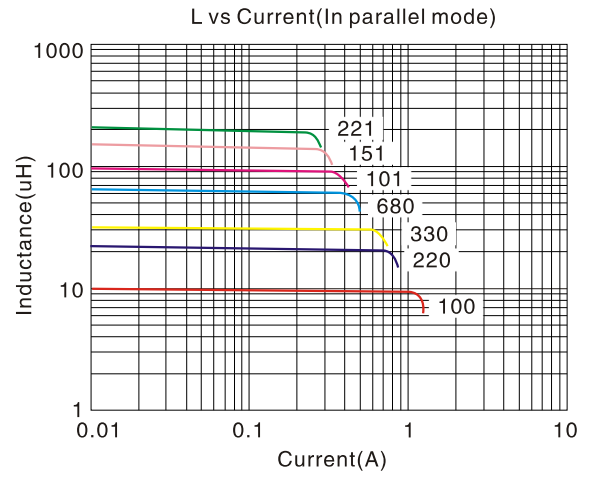
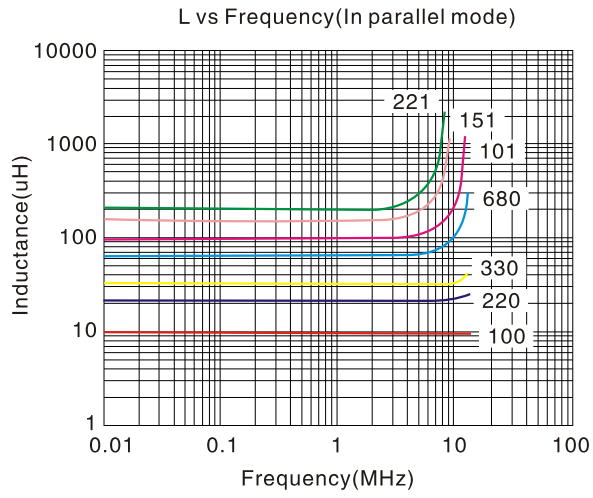
WINDING

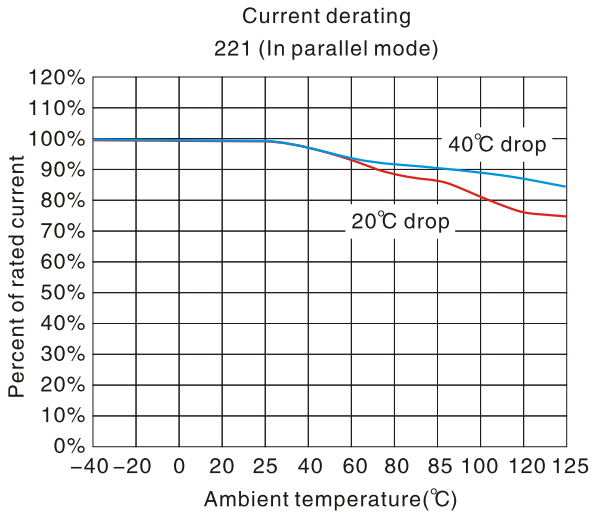
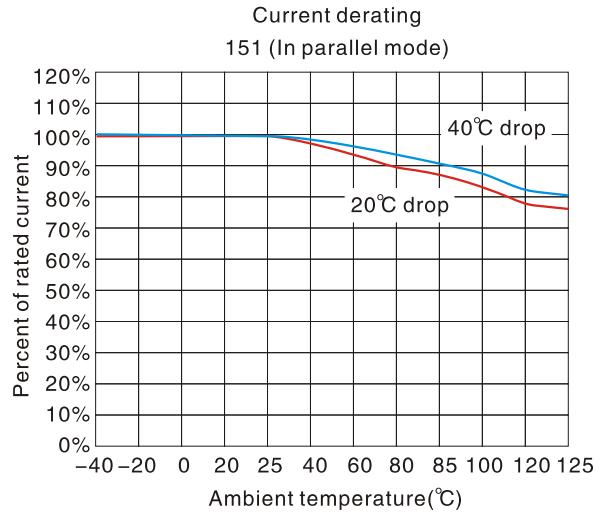
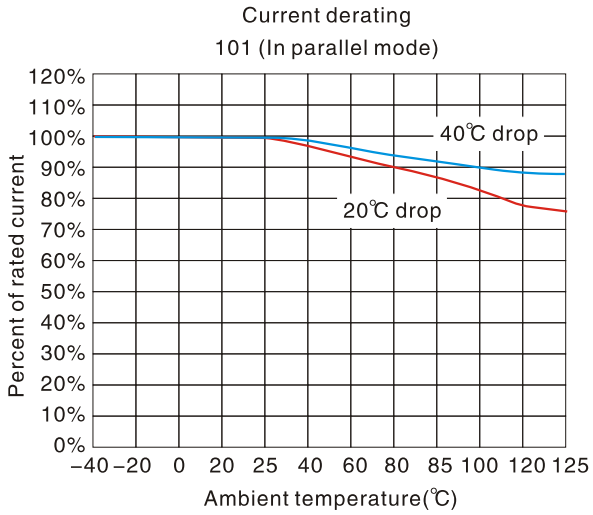


LAND PATTERN



**PERFORMANCE CURVE:**





**TYPICAL APPLY:**

