



HIGH CURRENT INDUCTORS

MODEL NO : SHI-130050SD/SHI-130050FS**Features :**

- * SMD version.
- * Low core loss and high efficiency performance.
- * Close magnetic path for low leakage flux.
- * Low DCR with flat wire design.
- * Compliant with RoHS and REACH.

Application :

- * DC/DC converter in power regulation system.
- * Automotive. * Solar energy. * Routers.

**Electrical Specification :**

PART NO	INDUCTANCE (μ H) $\pm 20\%$ @0ADC	INDUCTANCE (μ H) TYP. @TEMPERATURE RISE CURRENT	TEMPERATURE RISE CURRENT (ADC) (NOTE 2)	SATURATION CURRENT (ADC) (NOTE 3)	DCR $\pm 10\%$ (m Ω)
SHI-130050SD-R19	0.19 $\pm 30\%$	0.17	34.0	60.0	0.50
SHI-130050SD-R47	0.47	0.38	26.0	50.0	0.90
SHI-130050SD-R90	0.90	0.75	21.0	28.0	1.62
SHI-130050SD-1R4	1.40	1.10	20.0	26.0	2.40
SHI-130050SD-2R3	2.30	1.65	17.0	20.0	3.60
SHI-130050SD-3R2	3.20	2.30	14.0	15.0	5.30
SHI-130050SD-4R8	4.80	4.05	8.0	13.0	10.60
SHI-130050SD-6R0	6.00	5.00	7.5	11.5	13.70
SHI-130050FS-R30	0.30	0.26	32.0	50.0	0.58
SHI-130050FS-R47	0.47	0.38	30.0	34.0	0.90
SHI-130050FS-R72	0.72	0.60	28.0	31.0	1.08
SHI-130050FS-1R1	1.10	1.00	25.0	30.0	1.62
SHI-130050FS-1R4	1.40	1.20	18.0	24.0	1.62
SHI-130050FS-2R2	2.20	1.70	17.0	21.0	2.34
SHI-130050FS-3R2	3.20	2.40	15.0	17.0	3.60
SHI-130050FS-4R3	4.30	3.20	14.0	15.0	5.30
SHI-130050FS-6R0	6.00	4.10	13.0	13.0	7.00
SHI-130050FS-9R2	9.20	6.80	10.0	10.0	11.80
SHI-130050FS-120	12.0	8.50	8.5	9.0	15.00

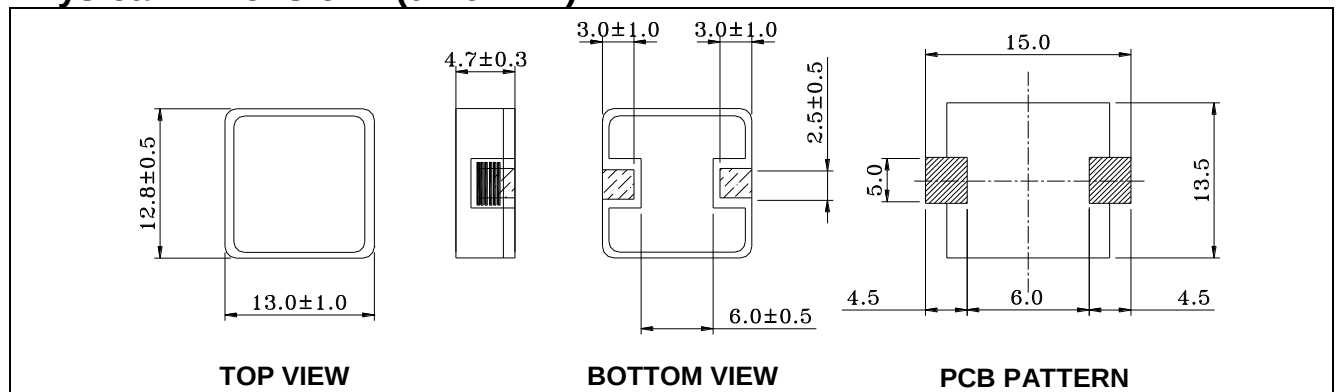
NOTE(1): Measuring condition: 100 KHZ, 0.1Vrms.

NOTE(2): $\Delta T=40^{\circ}\text{C}$ approximately under the temperature rise current.

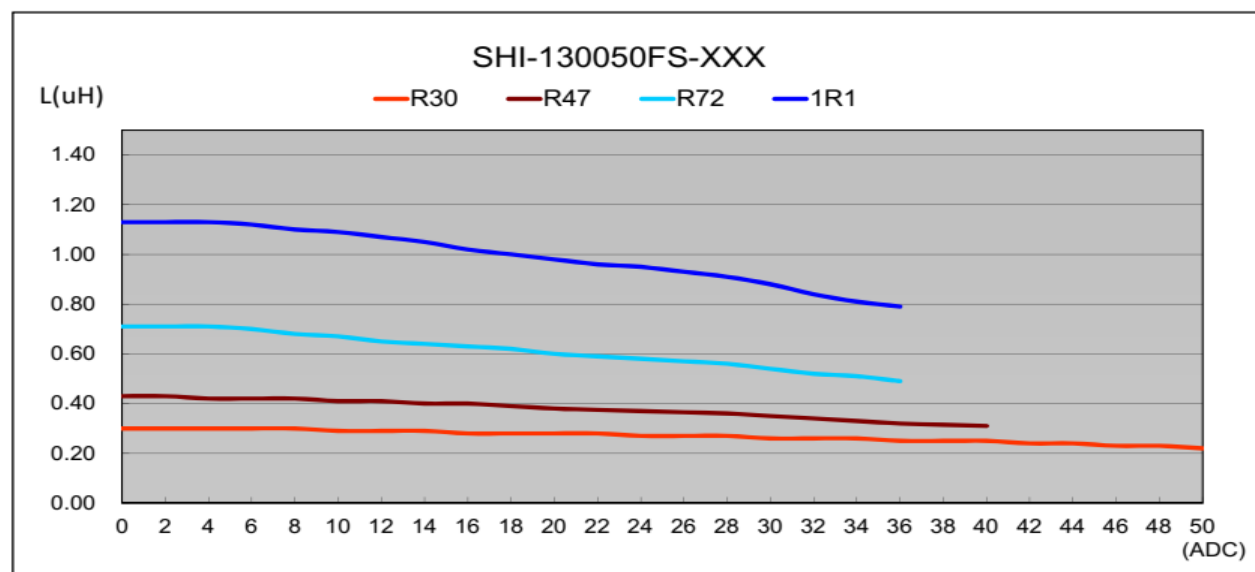
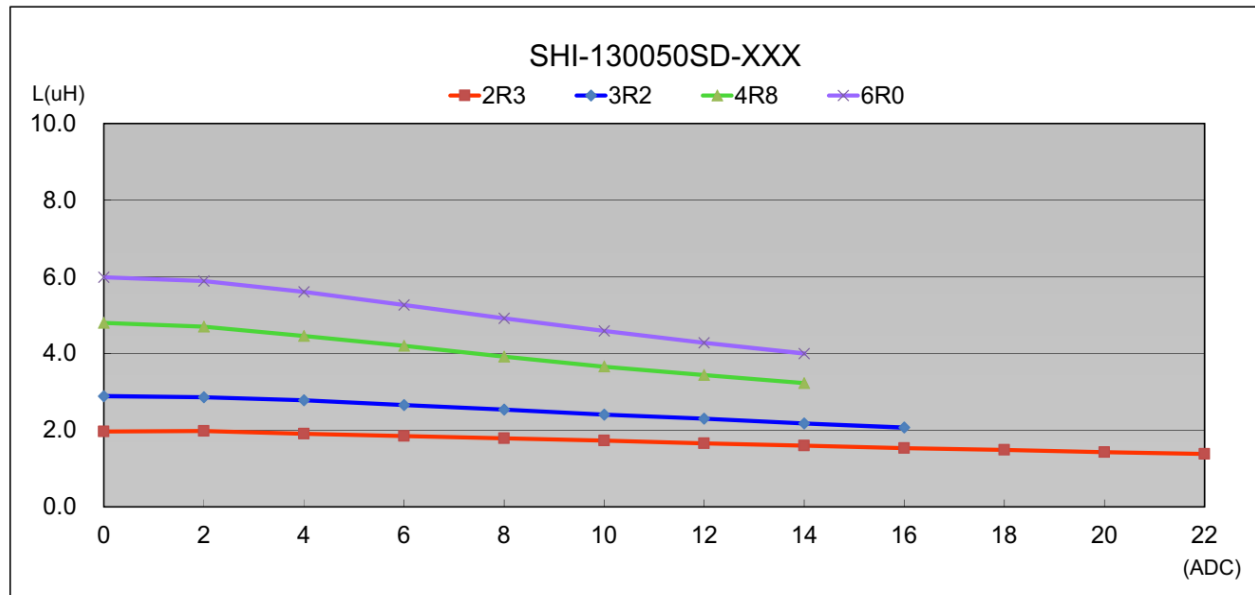
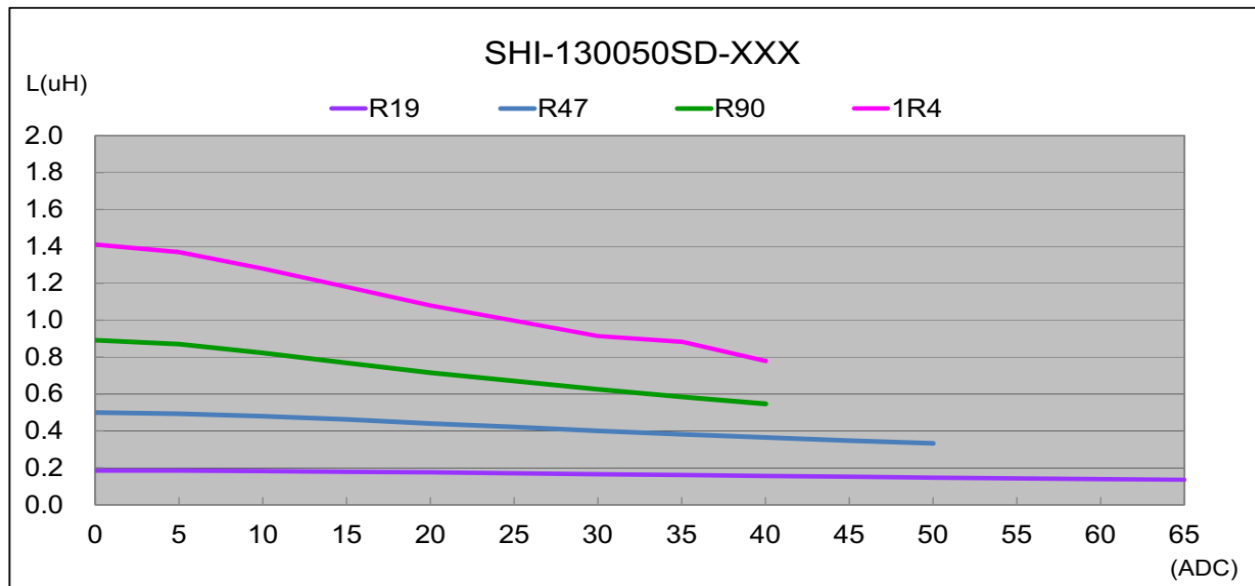
NOTE(3): The saturation current indicates the value of DC current is approximately 30% lower than its initial value of inductance.

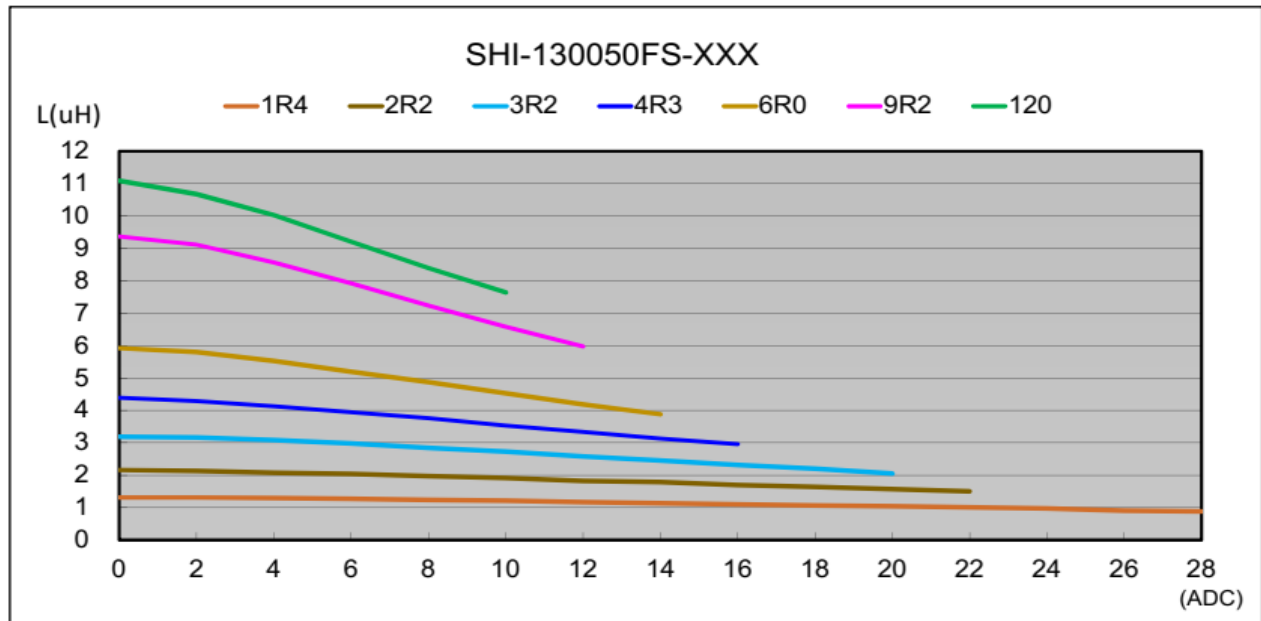
NOTE(4): Operating temperature range: $-40^{\circ}\text{C} \sim +150^{\circ}\text{C}$.

NOTE(5): Storage time : The recommended storage time of Inductor is maximum 12 months, and don't suggest to use the parts over 12 months.

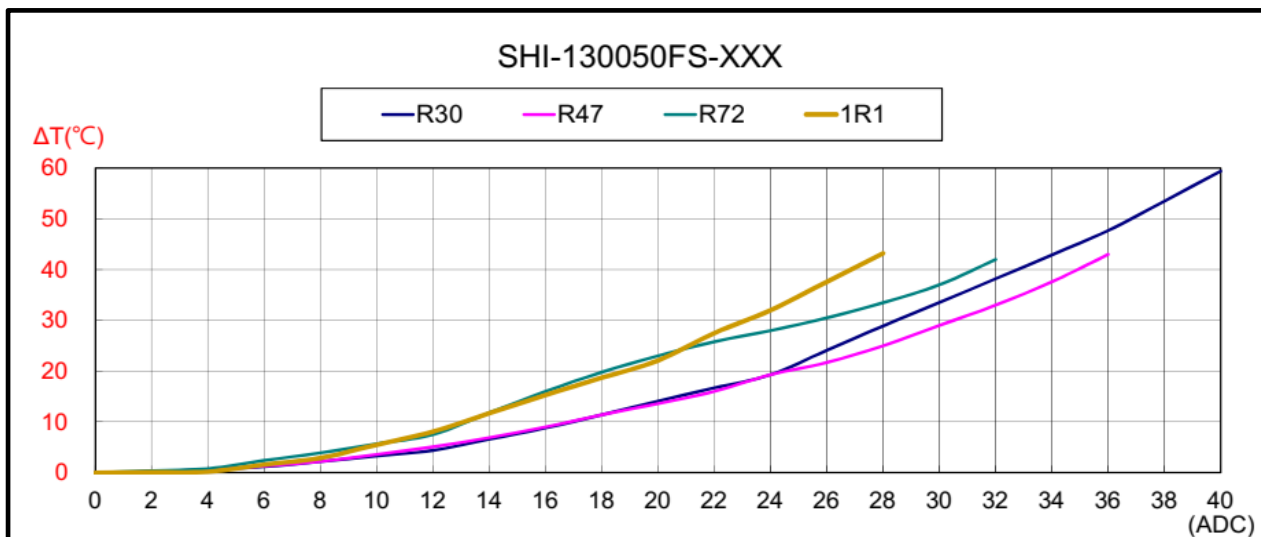
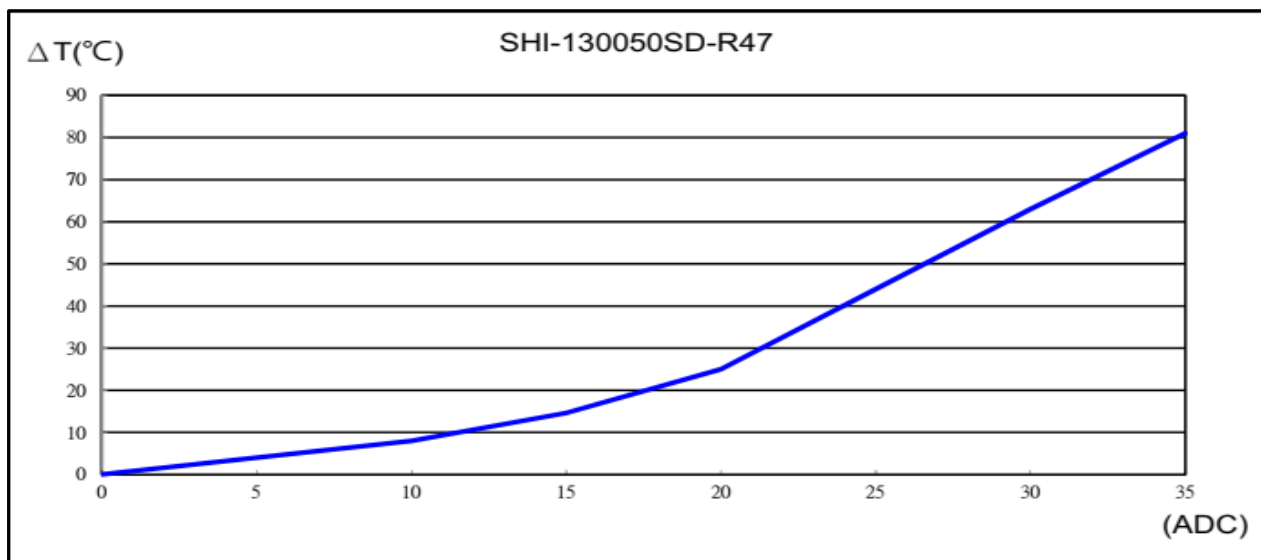
Physical Dimension : (unit :mm)

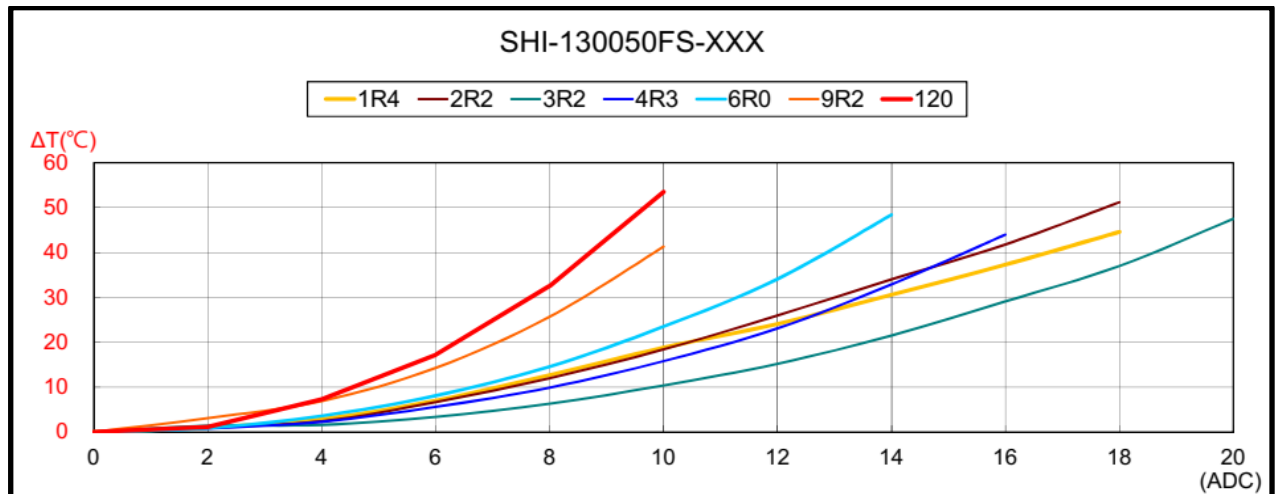
Inductance vs DC Bias :





Temperature Rise vs DC Bias:



**PACKAGING SPEC:**

1. REEL SIZE & UNITS PER REEL :13", 400 PCS.
2. TAPE WIDTH:24mm.
3. REEL WIDTH:29.5mm.
4. COMPONENT PITCH:16mm.