

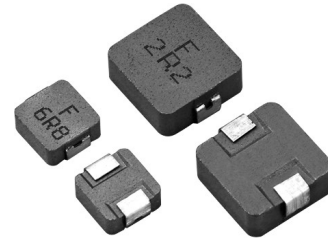


UPI F SERIES

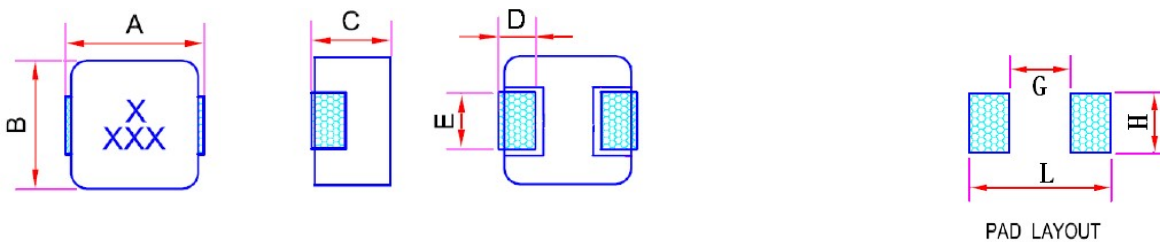
ULTRA HIGH CURRENT SMT POWER INDUCTOR.

Applications:

- . PDA/Notebook/Desktop, and server applications.
- . DC/DC converters in distributed power systems.
- . DC/DC converter for Field Programmable Gate Array(FPGA).



Shape and Dimensions(Dimensions are in mm) :



Item	A Max.	B Max.	C Max.	D	E	G	H	L
UPIFS0603	7.25	6.72	3.0	1.6±0.3	By each	3.7	3.5	8.0
UPIF0804	8.90	8.25	4.0	1.8±0.3	By each	4.6	3.8	10.6
UPIF1004	11.8	10.5	4.0	2.3±0.3	3.0±0.5	5.4	4.5	12.4

Features :

- . Low profile and low DCR.
- . Shielded construction.
- . handles high transient current spikes without saturation
- . **F** type frequency up to **3MHz**.
- . Ultra low buzz noise, due to composite construction.
- . RoHS compliant.

Characteristics:

- . Saturation Current (Isat) : The current causes L_0 dropped approximately 30% typically.
- . Temperature Rise Current(Irms) : The current causes the coil temperature rised approximately $\Delta T=40^\circ\text{C}$ without core Loss.
- . Operating Temperature : -55°C to 125°C .

Product Identification:

UPI F S 0603 - 2R2 M

(1) (2) (3) (4) (5)

(1) Series : Ultra High Current SMT Power Inductors.

(2) Style : **F**-Powder Type **S**- small Size.

(3) Dimensions : **0603** is size.

(4) Inductance: **2R2** for **2.2** uH.

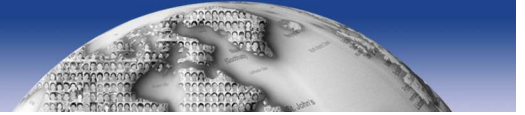
(5) Inductance tolerance: **M**: $\pm 20\%$.

Test equipments:

- . L tested by Wayne kerr 3260B LCR meter with Wayne kerr 3265B bias current source.
- . DCR tested by Milli-ohm meter.
- . Electrical specifications at 25°C .

Handling and precautions:

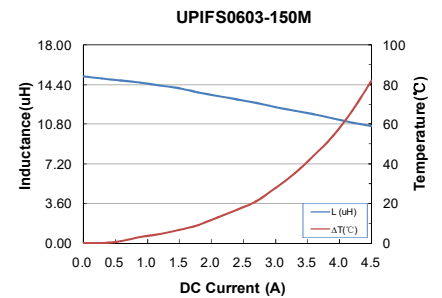
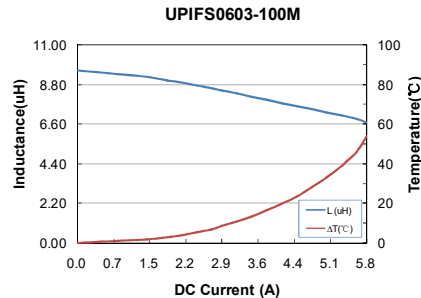
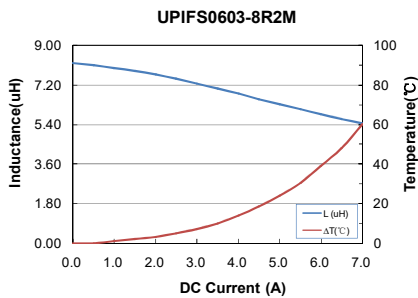
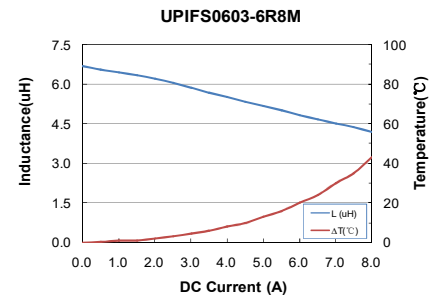
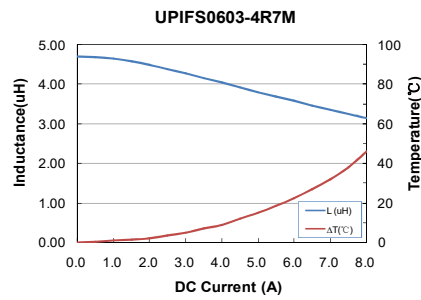
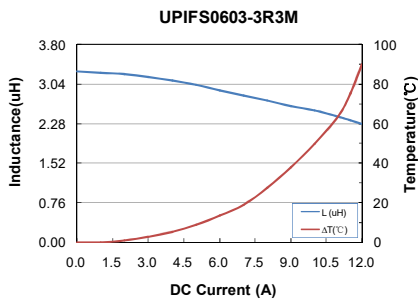
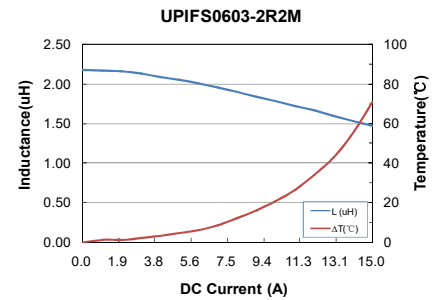
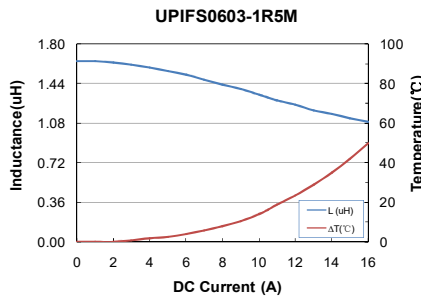
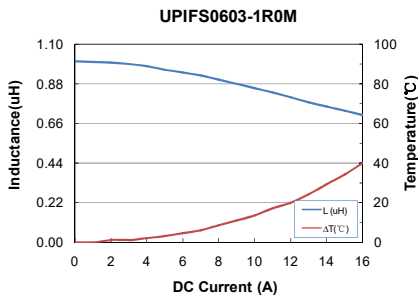
- . Please contact us before cleaning this product.

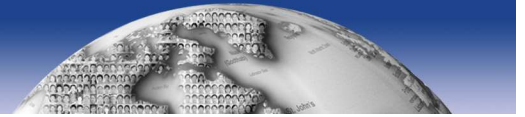


● UPIFS0603 series

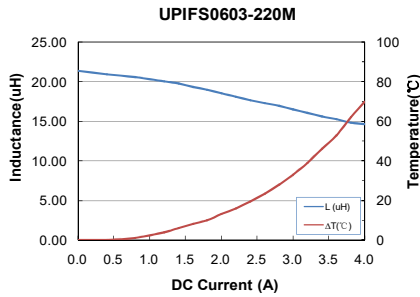
Part No.	Inductance @100kHz L_0 (μH)	DCR ($\text{m}\Omega$)		I_{sat} (A) Typ.	I_{rms} (A) Typ.	E mm ± 0.5
		Typical	Maximum			
UPIFS0603-1R0M	1.0	7.0	8.0	9.5	12.5	3.0
UPIFS0603-1R5M	1.5	10.2	12.0	8.5	10.5	3.0
UPIFS0603-2R2M	2.2	14.7	16.5	7.0	9.0	3.0
UPIFS0603-3R3M	3.3	23.5	26.0	6.5	7.0	3.0
UPIFS0603-4R7M	4.7	29.5	33.4	4.0	6.0	3.0
UPIFS0603-6R8M	6.8	41.0	46.8	4.0	5.5	3.0
UPIFS0603-8R2M	8.2	52.5	54.9	4.0	5.0	3.0
UPIFS0603-100M	10.0	64.5	71.2	3.5	4.0	3.0
UPIFS0603-150M	15.0	108.0	118.0	4.0	3.0	3.0
UPIFS0603-220M	22.0	126.0	135.0	2.5	2.9	3.0

Typical performance curves :





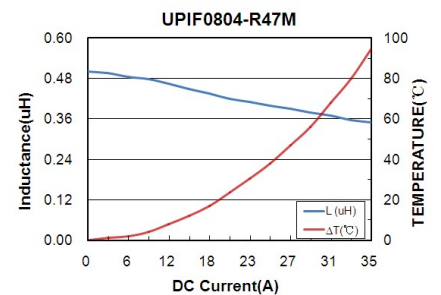
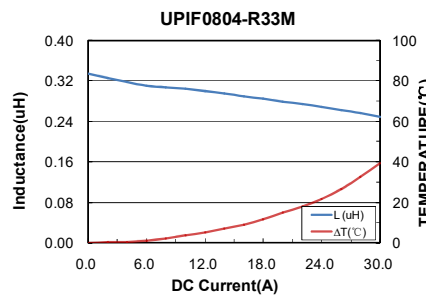
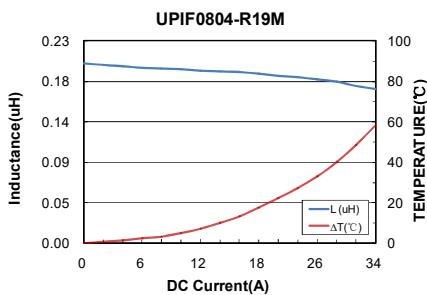
Typical performance curves :

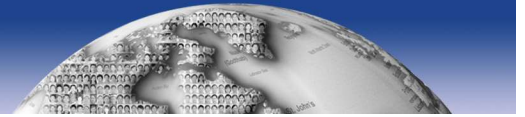


● UPIF0804 series

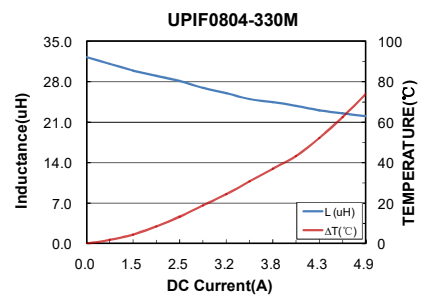
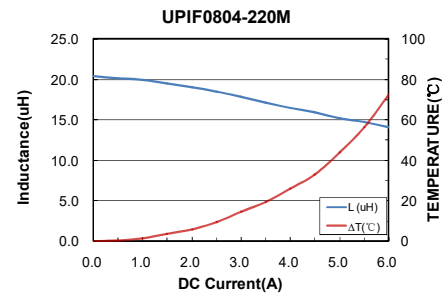
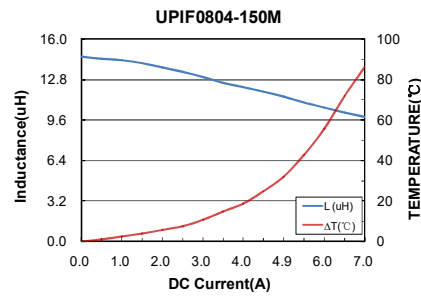
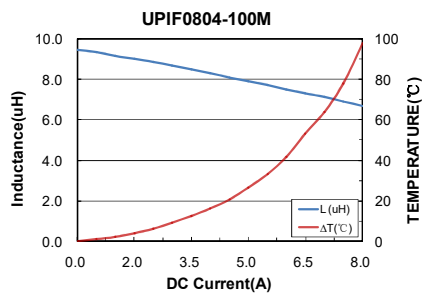
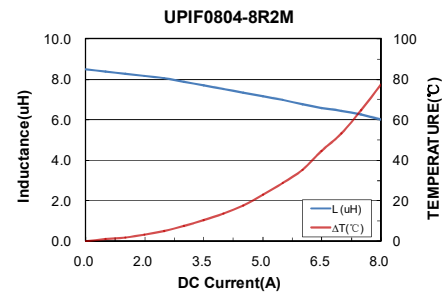
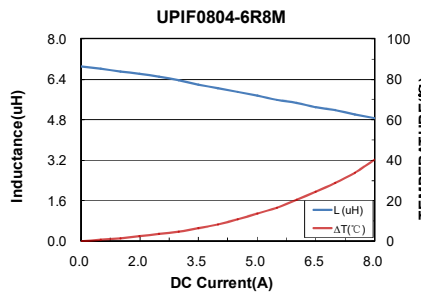
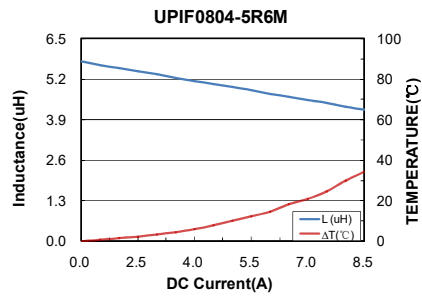
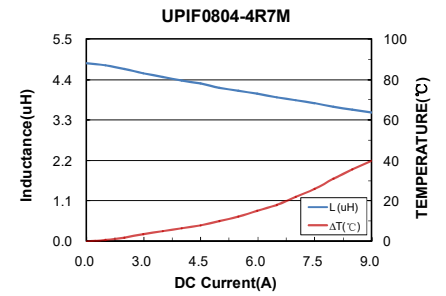
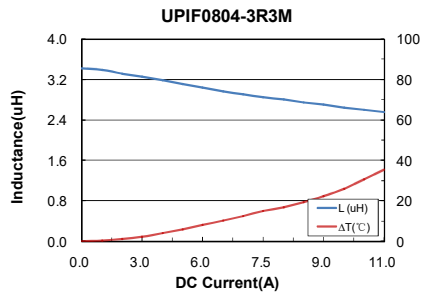
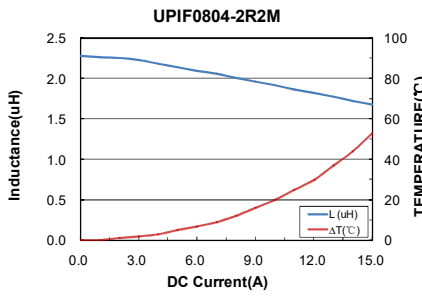
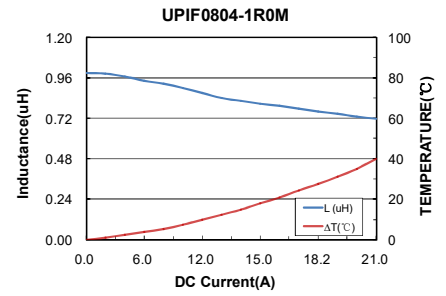
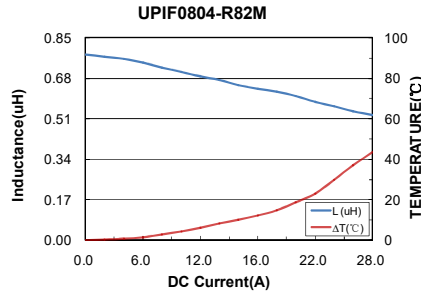
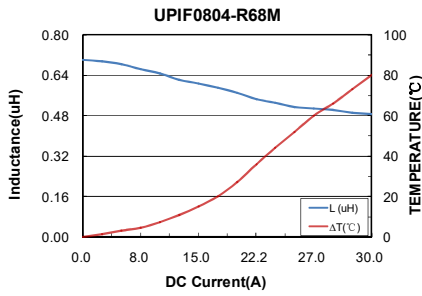
Part No.	Inductance @100kHz L ₀ (uH)	DCR (mΩ)		I sat (A) Typ.	I rms (A) Typ.	E mm ±0.5
		Typical	Maximum			
UPIF0804-R19M	0.19	1.18	1.35	22.0	34.0	3.0
UPIF0804-R33M	0.33	1.60	2.15	16.0	27.5	3.0
UPIF0804-R47M	0.47	2.22	2.38	14.0	25.0	3.0
UPIF0804-R68M	0.68	2.90	3.22	14.5	22.2	3.0
UPIF0804-R82M	0.82	2.81	3.88	15.0	19.5	3.0
UPIF0804-1R0M	1.0	4.03	4.63	12.0	18.2	3.2
UPIF0804-2R2M	2.2	8.8	9.41	10.2	14.5	3.2
UPIF0804-3R3M	3.3	12.45	14.9	9.7	10.5	3.2
UPIF0804-4R7M	4.7	19.8	22.6	8.7	8.0	3.2
UPIF0804-5R6M	5.6	24.53	28.6	7.6	7.4	3.2
UPIF0804-6R8M	6.8	28.34	33.4	6.7	7.0	3.2
UPIF0804-8R2M	8.2	39.64	45	6.6	5.7	3.2
UPIF0804-100M	10	44.15	51.8	6.4	5.4	3.2
UPIF0804-150M	15	53.50	65.3	3.7	4.9	3.2
UPIF0804-220M	22	70.47	94.2	3.3	4.3	3.2
UPIF0804-330M	33	114.78	144	3.2	3.2	3.2

Typical performance curves :





Typical performance curves :

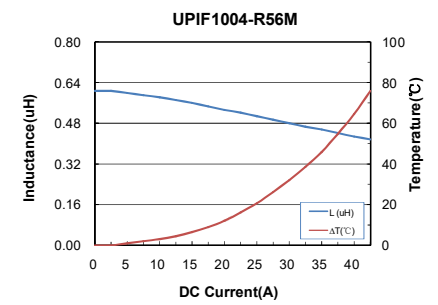
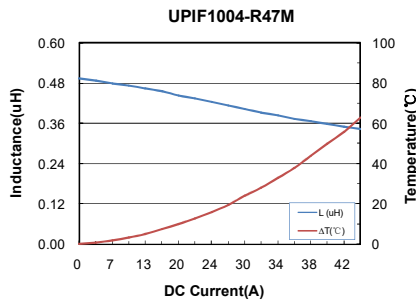
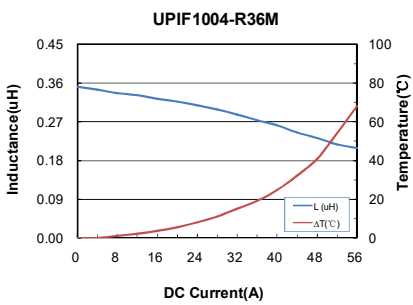
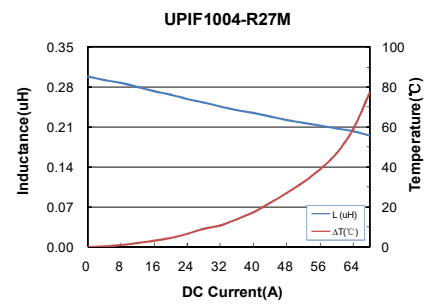
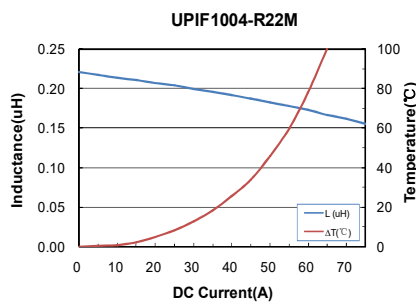
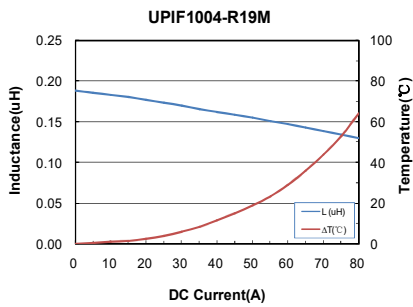


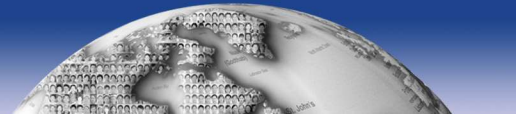


● **UPIF1004 series**

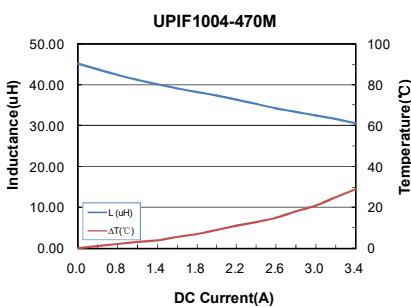
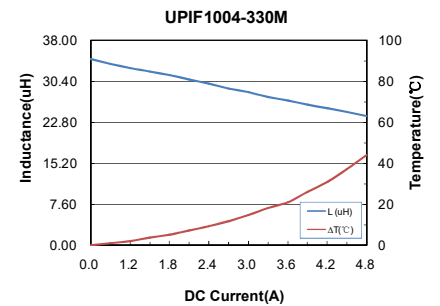
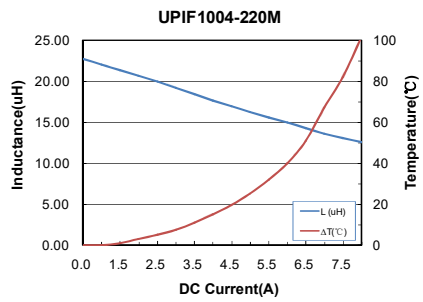
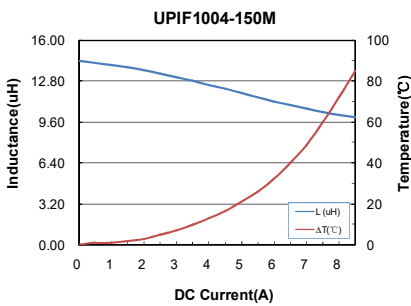
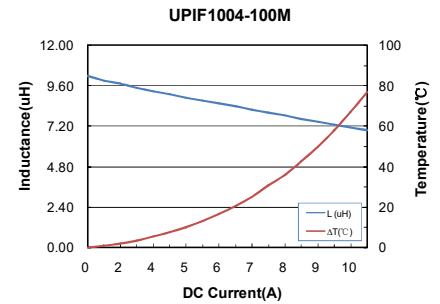
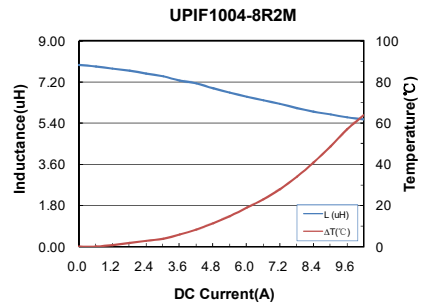
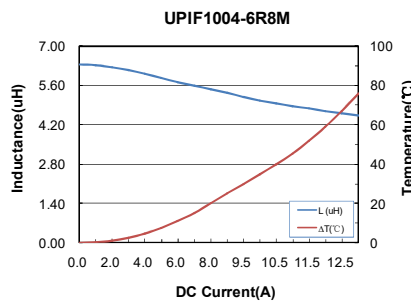
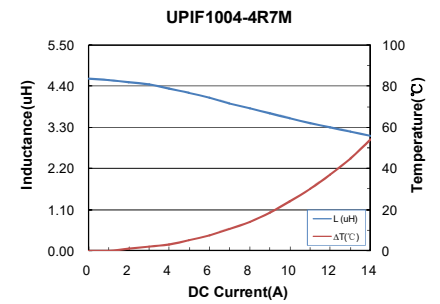
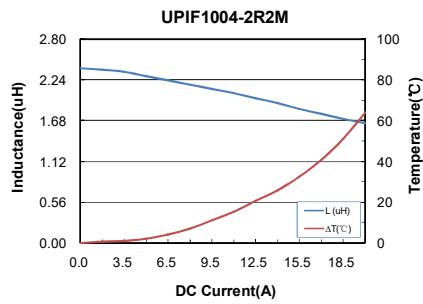
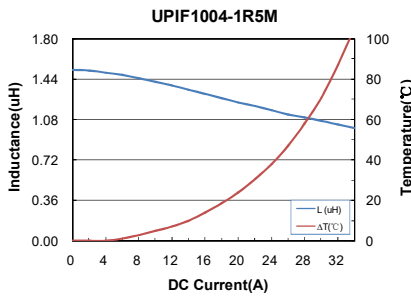
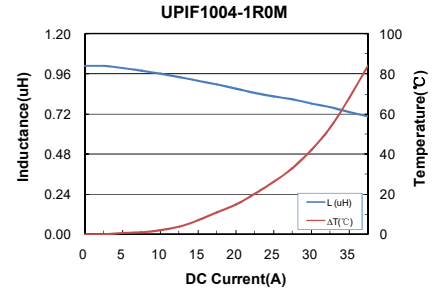
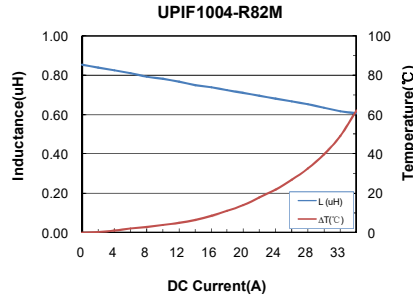
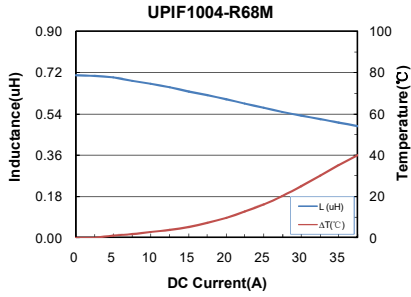
Part No.	Inductance @100kHz L ₀ (uH)	DCR (mΩ)		I sat (A) Typ.	I rms (A) Typ.	E mm ±0.5
		Typical	Maximum			
UPIF1004-R19M	0.19	0.6	0.8	46.0	40.0	3.0
UPIF1004-R22M	0.22	0.8	0.95	44.0	33.0	3.0
UPIF1004-R27M	0.27	0.8	0.95	44.0	33.0	3.0
UPIF1004-R36M	0.36	1.0	1.15	30.0	32.0	3.0
UPIF1004-R47M	0.47	1.4	1.68	30.0	30.0	3.0
UPIF1004-R56M	0.56	1.7	1.8	22.0	32.0	3.0
UPIF1004-R68M	0.68	1.7	1.85	22.0	27.0	3.0
UPIF1004-R82M	0.82	2.2	2.3	22.0	25.0	3.0
UPIF1004-1R0M	1.0	2.5	3.3	20.0	25.0	3.0
UPIF1004-1R5M	1.5	3.5	4.3	16.0	17.0	3.0
UPIF1004-2R2M	2.2	7.8	8.5	12.0	15.0	3.0
UPIF1004-4R7M	4.7	13.8	14.2	7.6	9.5	3.0
UPIF1004-6R8M	6.8	18.7	19.3	7.5	9.0	3.0
UPIF1004-8R2M	8.2	25.5	28.0	7.3	8.0	3.0
UPIF1004-100M	10.0	28.3	30.5	7.1	7.5	3.0
UPIF1004-150M	15.0	38.3	45.0	6.0	6.25	3.0
UPIF1004-220M	22.0	61.3	66.0	4.5	5.0	3.0
UPIF1004-330M	33.0	89.0	94.5	4.0	4.4	3.0
UPIF1004-470M	47.0	129.1	145.0	3.0	3.3	3.0

Typical performance curves :





Typical performance curves :



* Due to the limited space, the catalogue shows the typical specifications only. For more specific details (characteristics graph, reliability, and others), kindly invite you to access 3L official website www.3lcoil.com for better known.