Power Choke Coil CMLB063T type

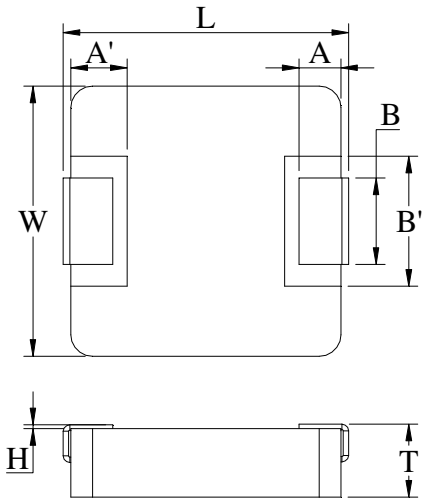
Features

High performance (Isat) realized by metal dust core.
Low profile：Thickness max. 3.0mm
Low loss realized with low DCR
Capable of corresponding high frequency (1MHz)
100% lead (Pb) free meet RoHS standard

Application

DC/DC converter for CPU in Notebook PC
Thin type on-board power supply module for exchanger
VRM for server

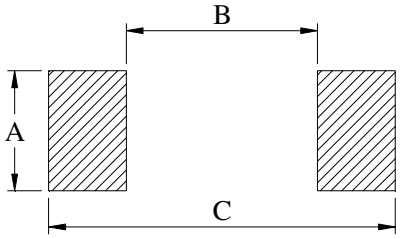
Outline Dimensions



Code	Dimensions (mm)
L	6.95 ± 0.35
W	6.6 ± 0.2
T	2.8 ± 0.2
A	1.6 ± 0.3
A’	2.0 ± 0.1
B	3.0 ± 0.3
B’	3.6 ± 0.2
H	0 ~ +0.15

Recommend Land Pattern Dimensions

The customer shall determine the land dimensions shown below after confirming and safety.



A	3.5
B	3.7
C	8.4

Unit : mm

Specifications

Part Number	L0 Inductance (μH) @ (0A)	R_{dc} (mΩ)		Heat Rating Current DC Amps. Idc (A)		Saturation Current DC Amps. Isat (A)	
		Typical	Maximum	Typical	Maximum	Typical	Maximum
CMLB063T-R10MS	0.10	0.81	0.99	40.0	35.0	60.2	48.0
CMLB063T-R15MS	0.15	1.8	2.4	30.0	25.0	41.0	35.0
CMLB063T-R20MS	0.20	2.2	3.0	26.0	22.0	38.0	33.0
CMLB063T-R22MS	0.22	2.3	3.0	25.0	21.0	35.0	32.0
CMLB063T-R33MS	0.33	2.7	3.3	22.0	20.0	26.0	22.0
CMLB063T-R36MS	0.36	3.2	3.8	20.0	18.0	24.5	22.0
CMLB063T-R47MS	0.47	3.48	4.1	18.0	16.0	21.0	17.8
CMLB063T-R56MS	0.56	3.88	4.5	16.5	15.0	20.0	16.0
CMLB063T-R68MS	0.68	4.75	5.3	16.0	14.5	19.0	15.0
CMLB063T-R82MS	0.82	5.38	6.0	14.0	13.0	17.0	14.0
CMLB063T-1R0MS	1.0	6.6	7.25	13.0	11.2	16.5	13.5
CMLB063T-1R2MS	1.2	7.7	8.6	11.7	10.1	14.5	12.5
CMLB063T-1R5MS	1.5	9.1	10.5	11.0	9.5	14.2	12.0
CMLB063T-2R2MS	2.2	13.4	15.0	8.5	8.0	12.5	10.5
CMLB063T-3R3MS	3.3	17.9	22.0	7.2	6.2	9.6	8.5
CMLB063T-4R7MS	4.7	27.9	33.0	6.0	5.5	6.55	5.5
CMLB063T-5R6MS	5.6	39.0	42.0	5.7	5.0	6.35	5.05
CMLB063T-6R8MS	6.8	42.0	48.0	4.7	4.2	6.3	5.0
CMLB063T-8R2MS	8.2	53.9	60.0	4.5	3.8	6.05	4.92
CMLB063T-100MS	10.0	60.0	68.0	4.0	3.5	5.6	4.9
CMLB063T-150MS	15.0	132.5	150.0	2.7	2.4	3.8	3.3
CMLB063T-220MS	22.0	179.5	200.0	2.3	2.0	3.1	2.5
CMLB063T-330MS	33.0	274.0	284.0	2.1	1.8	2.3	2.0

*: If you require another part number please contact with us.

**: Inductance Tolerance ± 20%

Note 1.： All test data is referenced to 25℃ ambient.

Note 2.： Test Condition:100KHz, 1.0Vrms

Note 3.： Idc : DC current (A) that will cause an approximate ΔT of 40℃

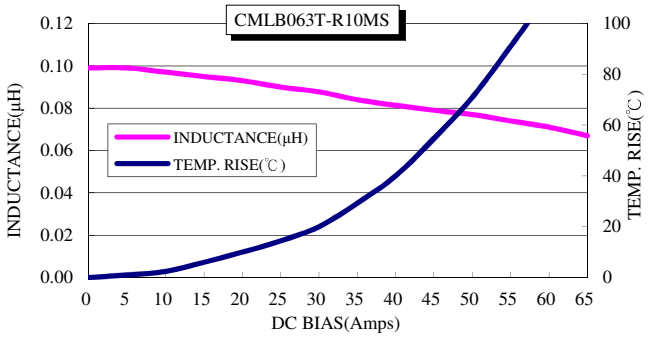
Note 4.： Isat : DC current (A) that will cause L0 to drop approximately 30%

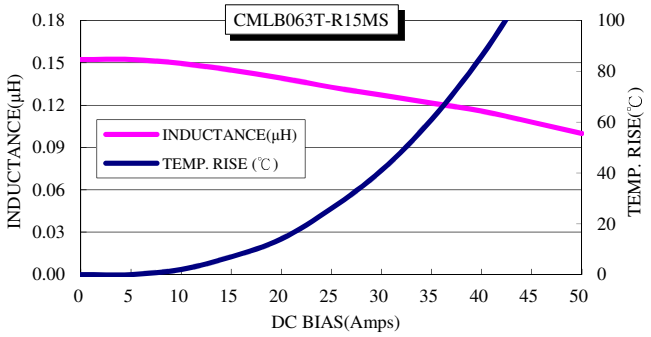
Note 5.： Operating Temperature Range -55℃ to + 125℃

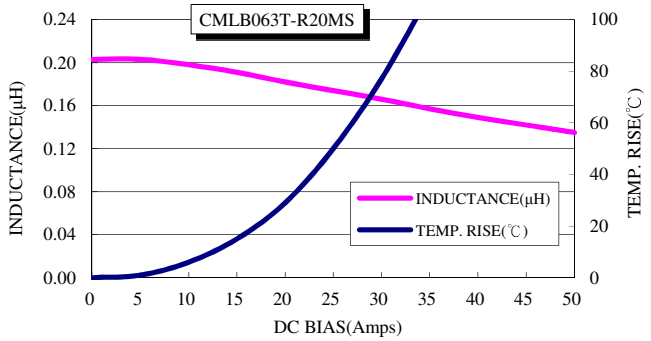
Note 6.： The part temperature (ambient + temp rise) should not exceed 125℃ under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

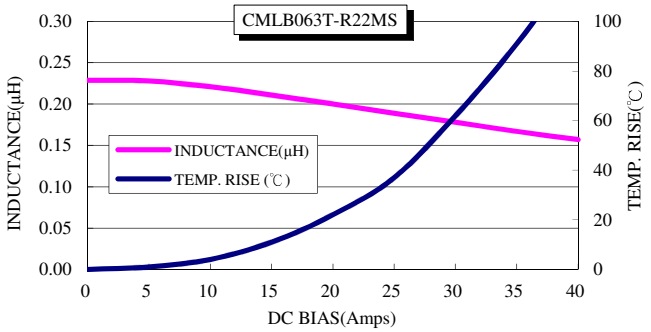
Note 7.： The rated current as listed is either the saturation current or the heating current depending on which value is lower.

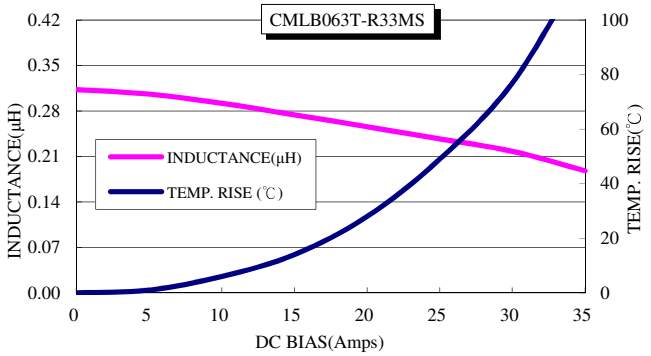
Current Characteristic

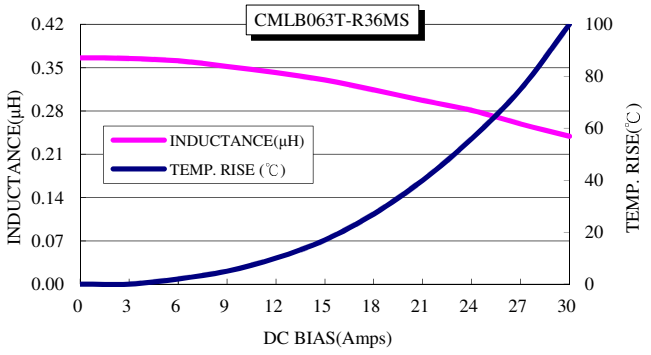


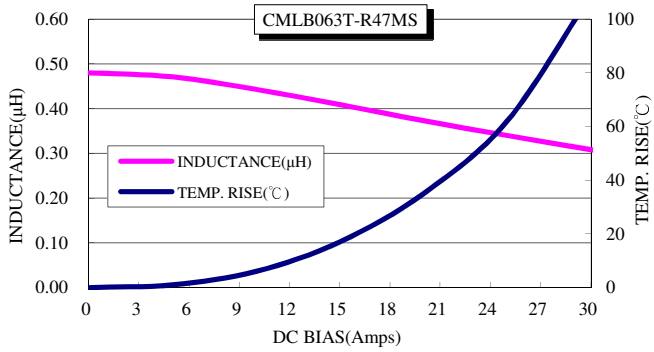


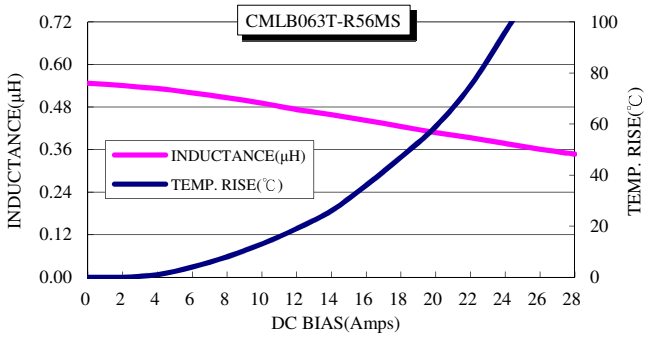


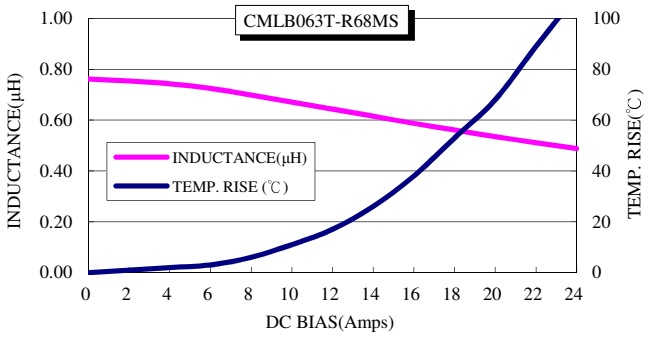


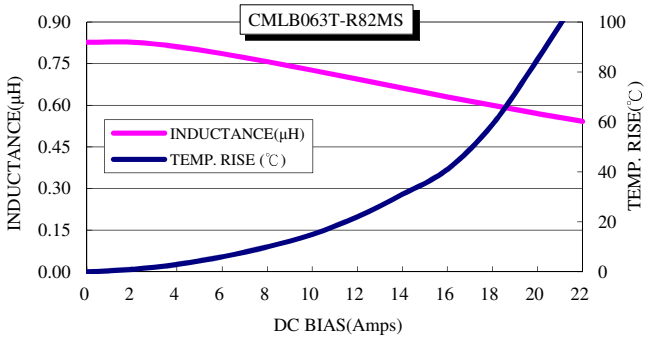


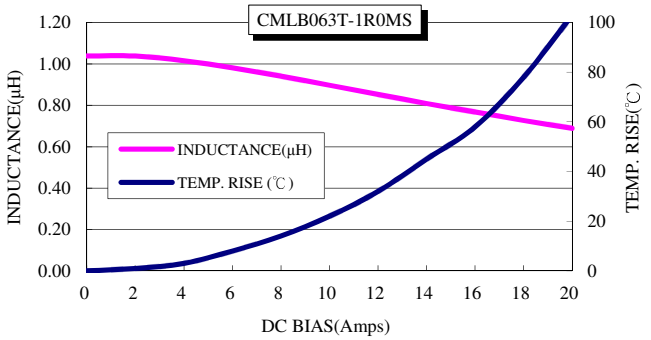


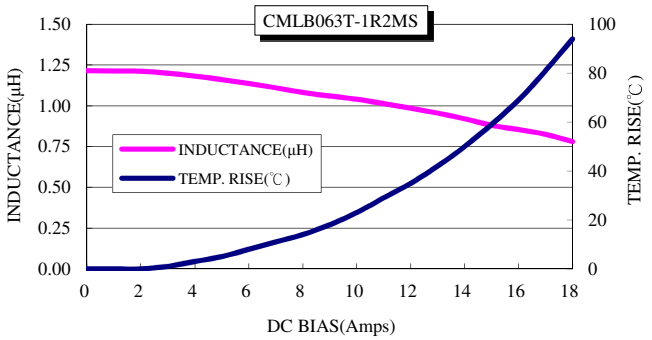


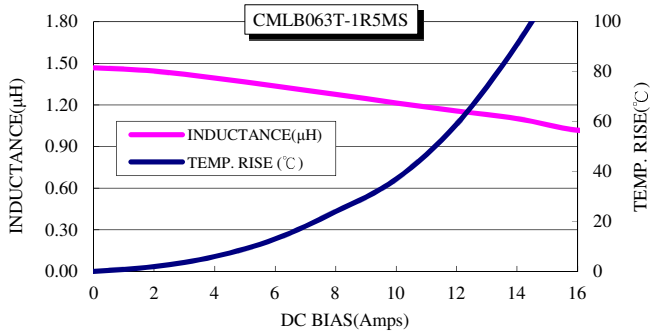



CMLB063T-R68MS
INDUCTANCE(μH)
TEMP. RISE (℃)
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)


CMLB063T-R82MS
INDUCTANCE(μH)
TEMP. RISE (℃)
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)


CMLB063T-1R0MS
INDUCTANCE(μH)
TEMP. RISE (℃)
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)


CMLB063T-1R2MS
INDUCTANCE(μH)
TEMP. RISE(℃)
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)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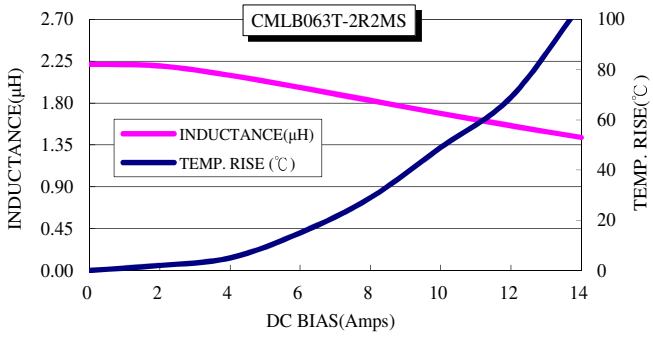
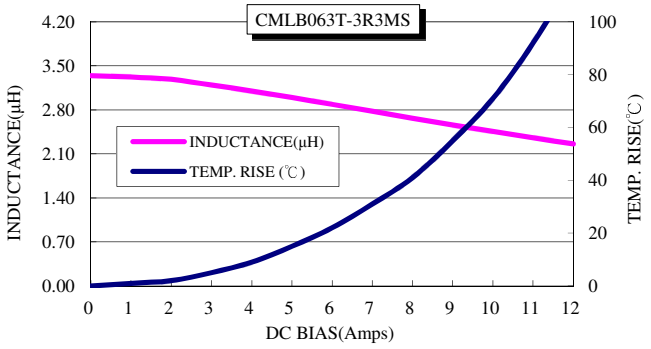
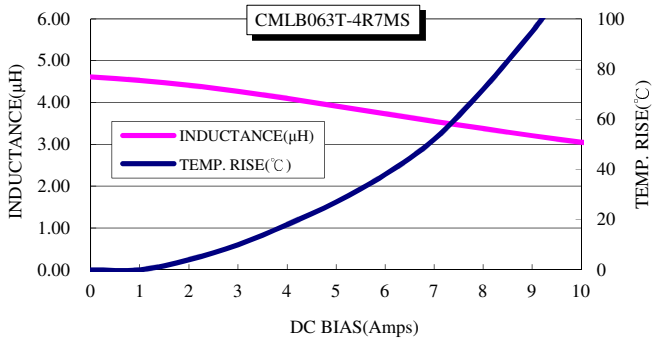
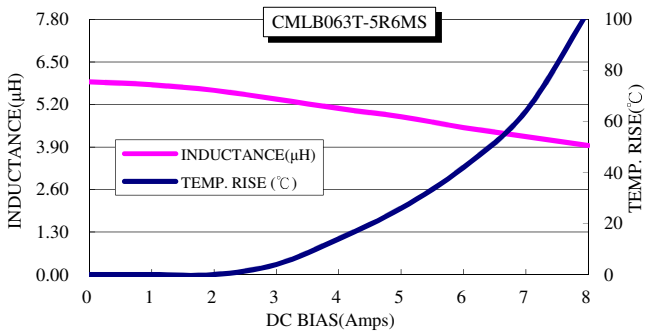
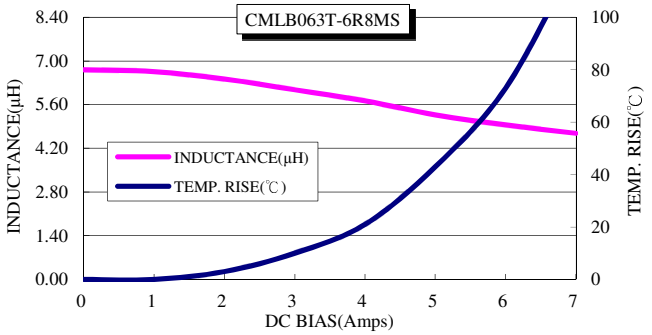
TEMP. RISE (℃)
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)

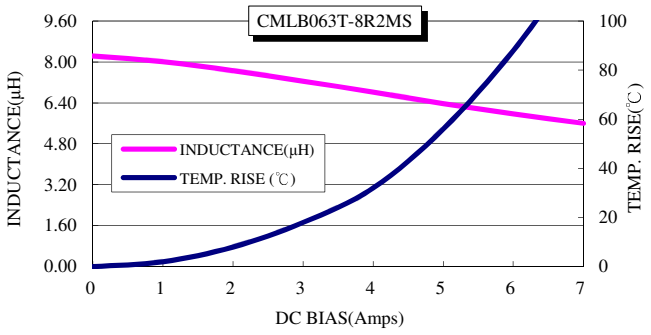

CMLB063T-2R2MS
INDUCTANCE(μH)
TEMP. RISE (℃)
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)

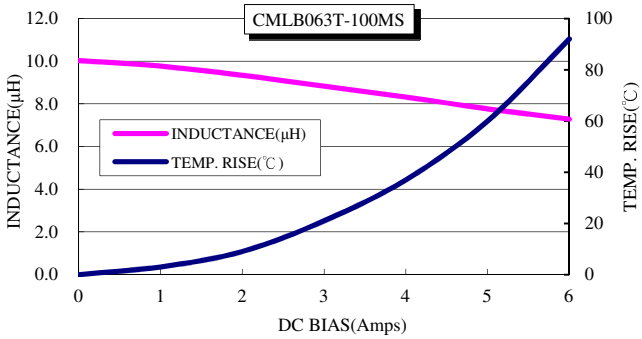

CMLB063T-3R3MS
INDUCTANCE(μH)
TEMP. RISE (℃)
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)

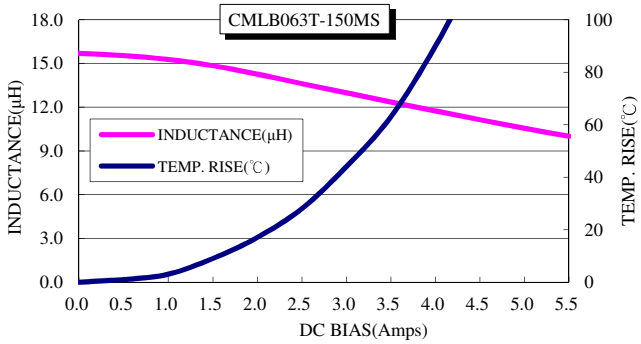

CMLB063T-4R7MS
INDUCTANCE(μH)
TEMP. RISE(℃)
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)


CMLB063T-5R6MS
INDUCTANCE(μH)
TEMP. RISE(℃)
INDUCTANCE(μH)
TEMP. RISE (℃)
DC BIAS(Amps)


CMLB063T-6R8MS
INDUCTANCE(μH)
TEMP. RISE(℃)
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)


CMLB063T-8R2MS
INDUCTANCE(μH)
TEMP. RISE(℃)
INDUCTANCE(μH)
TEMP. RISE (℃)
DC BIAS(Amps)


CMLB063T-100MS
INDUCTANCE(μH)
TEMP. RISE(℃)
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)


CMLB063T-150MS
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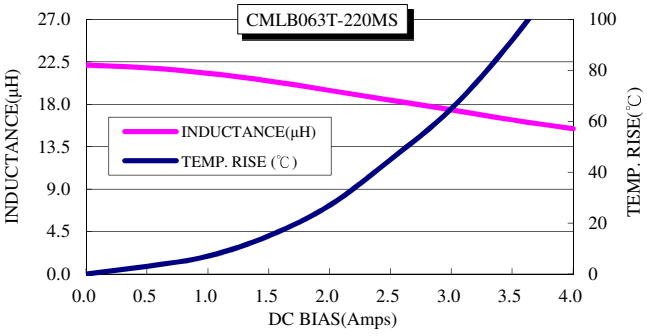
TEMP. RISE(℃)
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)


CMLB063T-220MS
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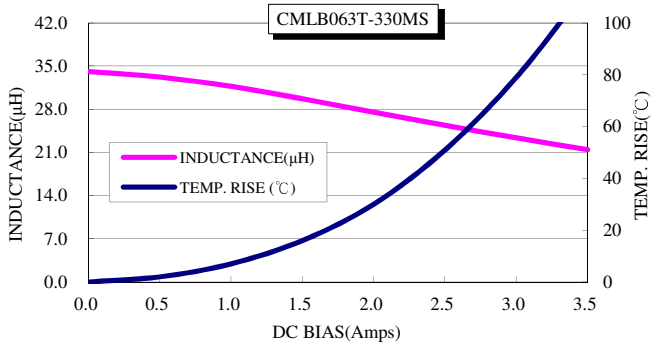
TEMP. RISE(℃)
INDUCTANCTANCE(μH)
TEMP. RISE (℃)
DC BIAS(Amps)


CMLB063T-330MS
INDUCTANCE(μH)
TEMP. RISE(℃)
INDUCTANCE(μH)
TEMP. RISE (℃)
DC BIAS(Amps)