

HER6042C

New Products

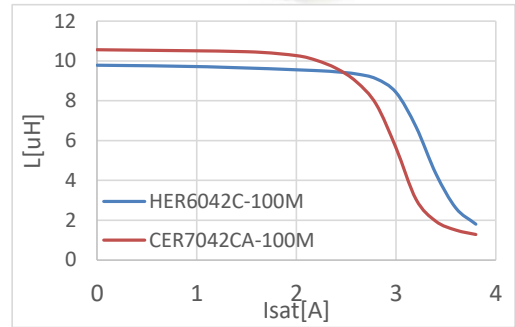
RoHS

AEC-Q200



■ Features

- Compact Power Inductor for Automotive-Equipment
- Upgrade the current characteristics by using different magnetic materials separately for drum core and ring core
- Current characteristic equivalent to our 7mm SQUARE coils
- AEC-Q200 plan to be qualified



Operating Temperature Range : -40 °C ~ +150 °C (include self-heating)

■ Application

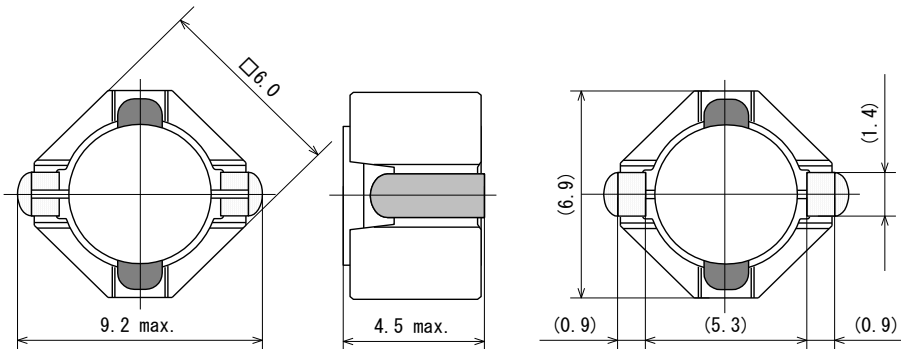
- AudioVisual
- TV and Monitor, Mini component, AV amplifier, Amplifier for profes, Camera, Recorder
- Computer & Peripheral Device
- Computer, Printer(MFP), Industrial machines
- Home Electronics
- LED Lights
- Others
- Power Supply, FA, Medical, Energy, Transceivers

■ Magnetic structure



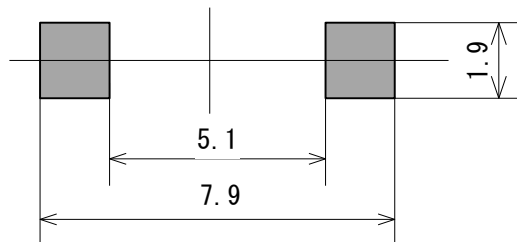
Weight : 0.5 g

■ Dimensions



(Unit : mm)

■ Recommended Land Pattern



SAGAMI ELEC CO., LTD.
<https://www.sagami-elec.co.jp>

10-30, Ichibashimo-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0024, Japan
 Over Seas Sales Dept. TEL : +81 45 511 3141, E-mail : ossg@sagami-elec.co.jp
 Engineering Dept. TEL : +81 45 521 4543

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■ Specifications

SAGAMI Part No.	Inductance (μ H)	DCR Resistance (Ω) $\pm 30\%$	Rated current			
			DC saturation allowable current (A)		Temperature rise allowable current (A)	
			Spec.	Typical	Spec.	Typical
HER6042C-R82N	0.82 $\pm 30\%$	0.00800	9.60	11.2	5.10	7.00
HER6042C-1R2N	1.2 $\pm 30\%$	0.0100	8.10	9.40	4.60	6.30
HER6042C-1R6N	1.6 $\pm 30\%$	0.0120	6.80	8.20	4.30	5.80
HER6042C-2R2N	2.2 $\pm 30\%$	0.0130	5.90	7.20	4.00	5.40
HER6042C-3R0N	3.0 $\pm 30\%$	0.0160	5.00	6.30	3.70	5.10
HER6042C-3R6N	3.6 $\pm 30\%$	0.0180	4.60	5.70	3.60	4.90
HER6042C-4R3N	4.3 $\pm 30\%$	0.0200	4.10	5.10	3.30	4.40
HER6042C-5R1N	5.1 $\pm 30\%$	0.0250	3.80	4.70	2.90	4.00
HER6042C-6R2N	6.2 $\pm 30\%$	0.0310	3.40	4.20	2.70	3.60
HER6042C-8R2N	8.2 $\pm 30\%$	0.0420	3.00	3.60	2.20	3.00
HER6042C-100M	10 $\pm 20\%$	0.0560	2.80	3.30	1.90	2.60
HER6042C-120M	12 $\pm 20\%$	0.0630	2.40	3.00	1.80	2.45
HER6042C-150M	15 $\pm 20\%$	0.0710	2.25	2.70	1.65	2.25
HER6042C-180M	18 $\pm 20\%$	0.0820	2.05	2.45	1.55	2.10
HER6042C-220M	22 $\pm 20\%$	0.0900	1.80	2.25	1.50	2.00
HER6042C-270M	27 $\pm 20\%$	0.100	1.65	2.05	1.35	1.90
HER6042C-330M	33 $\pm 20\%$	0.110	1.50	1.85	1.30	1.80
HER6042C-390M	39 $\pm 20\%$	0.130	1.40	1.70	1.25	1.70
HER6042C-470M	47 $\pm 20\%$	0.150	1.30	1.60	1.15	1.55
HER6042C-560M	56 $\pm 20\%$	0.220	1.15	1.40	0.950	1.30
HER6042C-680M	68 $\pm 20\%$	0.260	1.05	1.25	0.870	1.15
HER6042C-820M	82 $\pm 20\%$	0.320	1.00	1.20	0.780	1.05
HER6042C-101M	100 $\pm 20\%$	0.420	0.910	1.05	0.660	0.880
HER6042C-121M	120 $\pm 20\%$	0.530	0.810	0.970	0.600	0.820
HER6042C-151M	150 $\pm 20\%$	0.590	0.740	0.890	0.570	0.780
HER6042C-181M	180 $\pm 20\%$	0.670	0.680	0.810	0.540	0.730
HER6042C-221M	220 $\pm 20\%$	0.750	0.620	0.750	0.510	0.690
HER6042C-271M	270 $\pm 20\%$	0.950	0.550	0.670	0.440	0.600
HER6042C-331M	330 $\pm 20\%$	1.20	0.480	0.590	0.400	0.540
HER6042C-391M	390 $\pm 20\%$	1.54	0.420	0.510	0.350	0.480
HER6042C-471M	470 $\pm 20\%$	1.96	0.400	0.480	0.300	0.410
HER6042C-561M	560 $\pm 20\%$	2.18	0.350	0.440	0.280	0.380

- Inductance Measuring Condition : 100kHz,1V
- Rated current : DC saturation allowable current or Temperature rise allowable current, whichever is smaller.
 1. DC saturation allowable current (Spec.) : value of inductance decrease within 30%.
DC saturation allowable current (Typical) : value of inductance decrease 30%.
 2. Temperature rise allowable current (Spec.) : A rise in temperature of core surface is within 40°C.
Temperature rise allowable current (Typical) : A rise in temperature of core surface is 40°C.



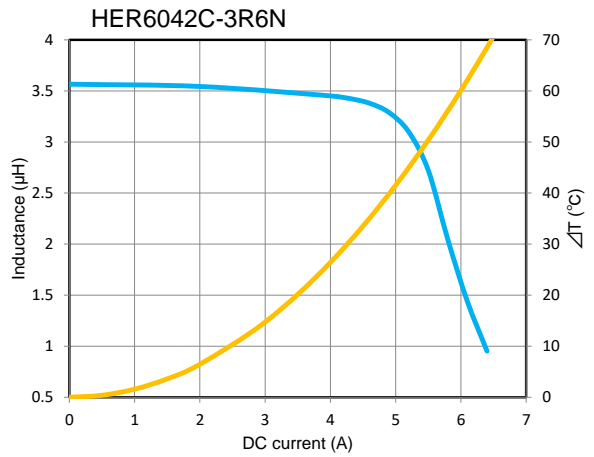
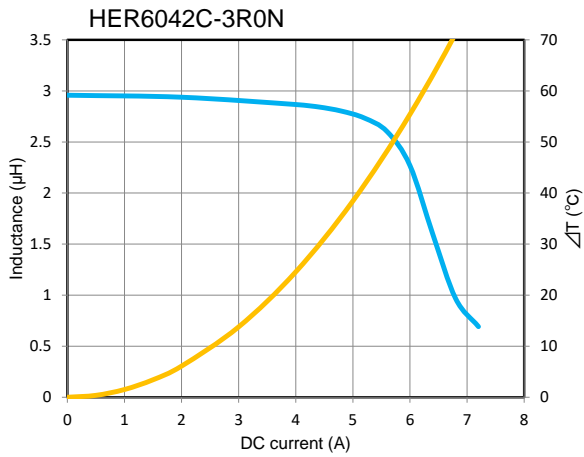
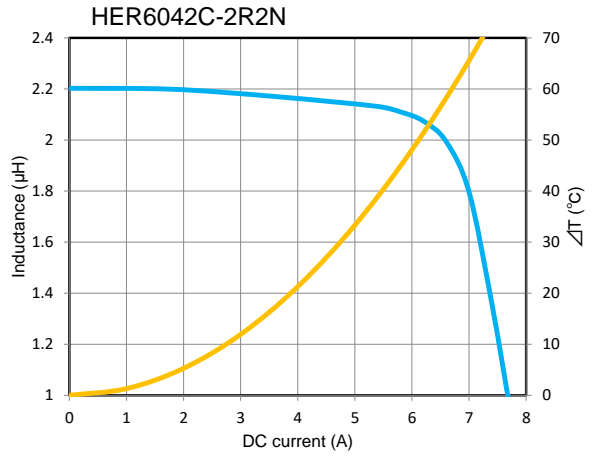
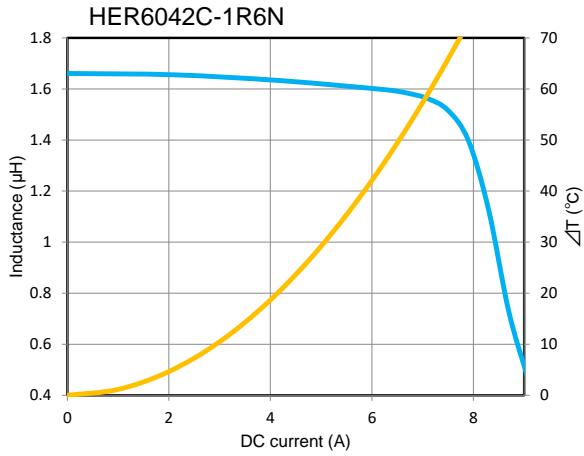
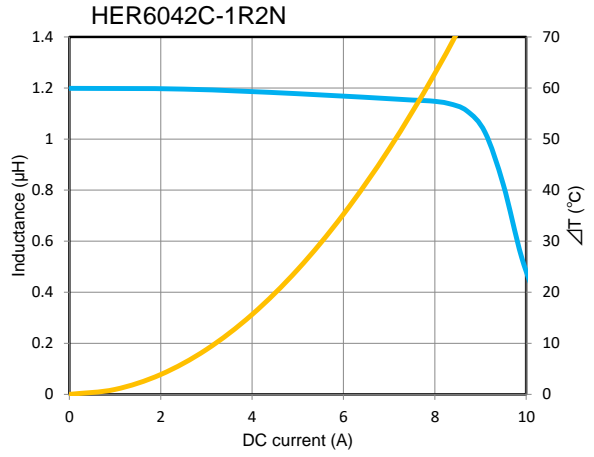
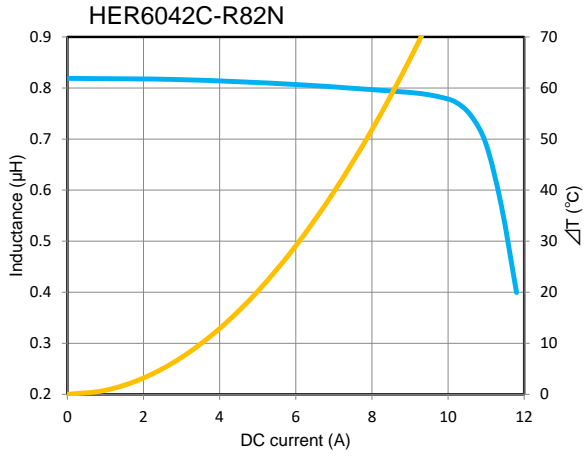
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DC bias characteristics vs Temperature Rise Graph

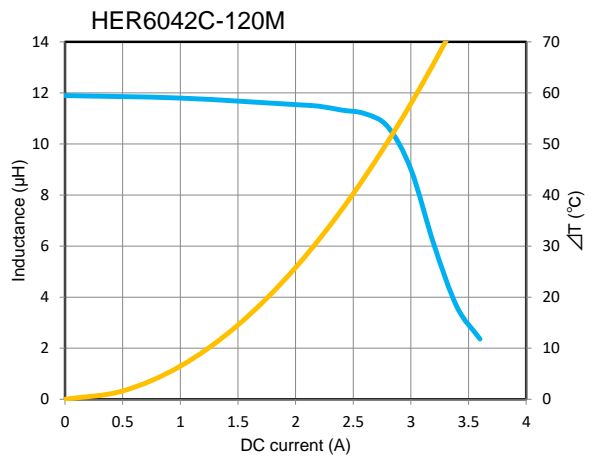
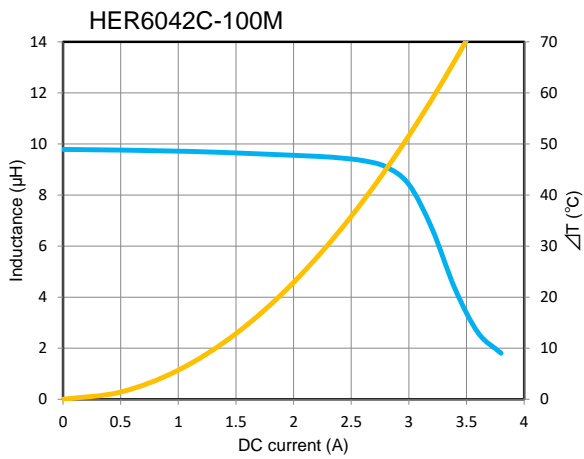
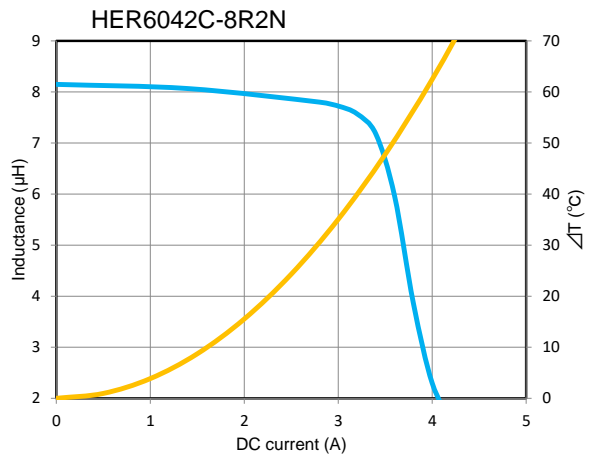
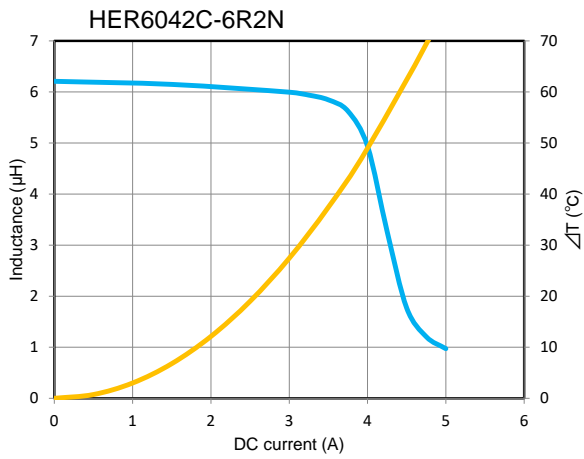
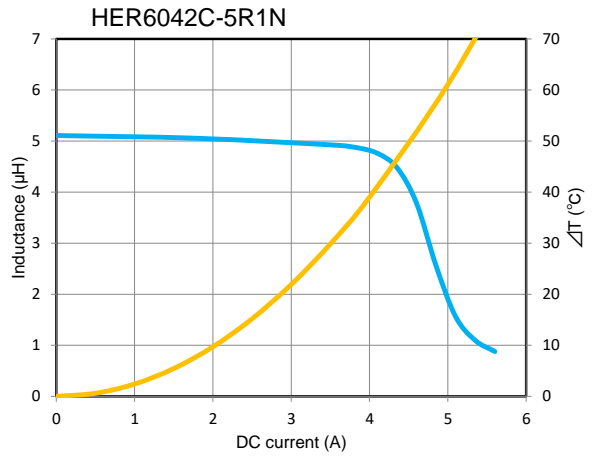
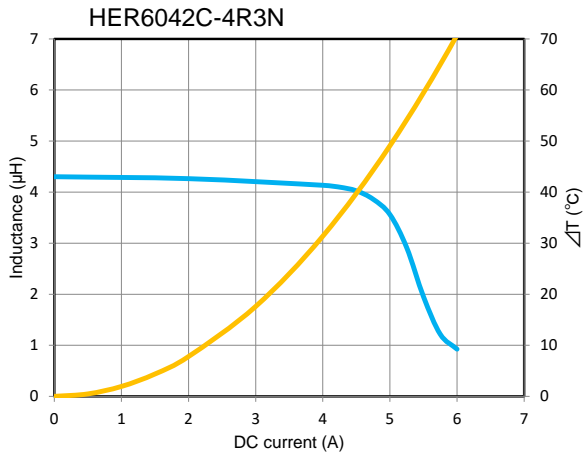
■ L(25°C) ■ ΔT



DC bias characteristics vs Temperature Rise Graph

 L(25°C)

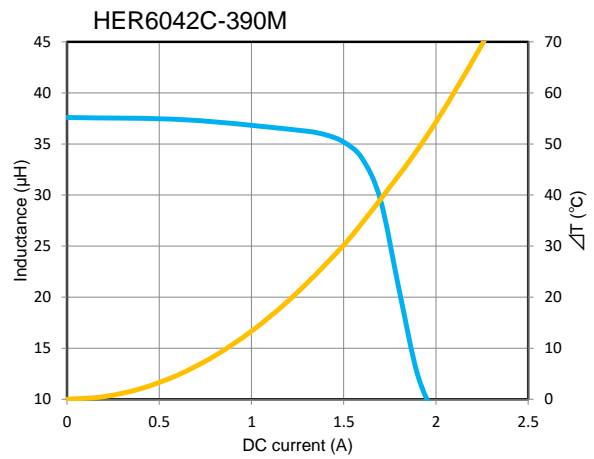
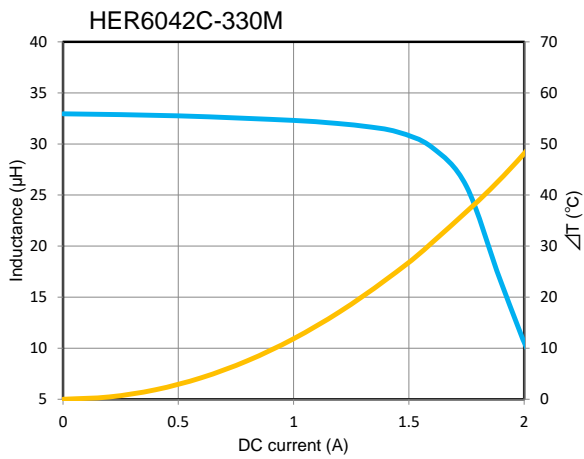
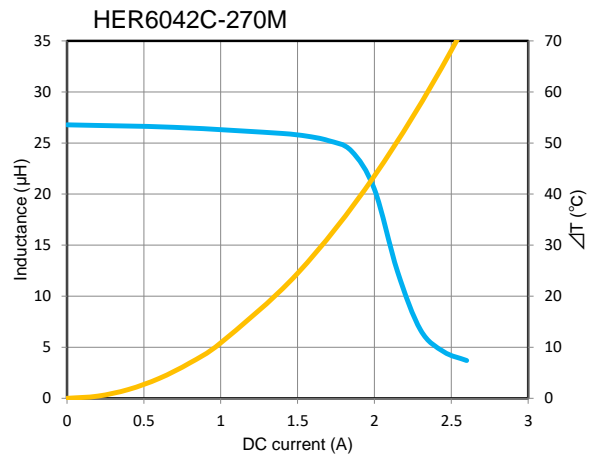
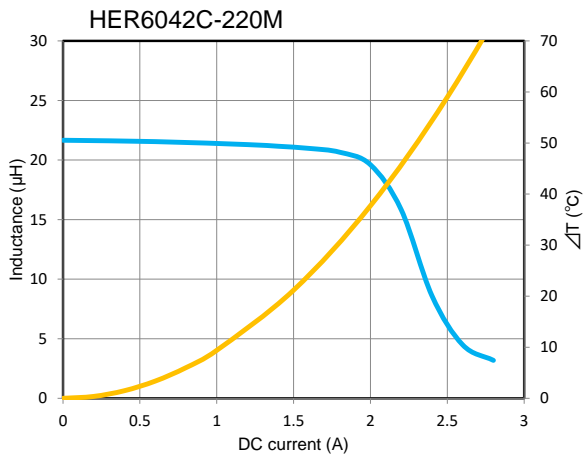
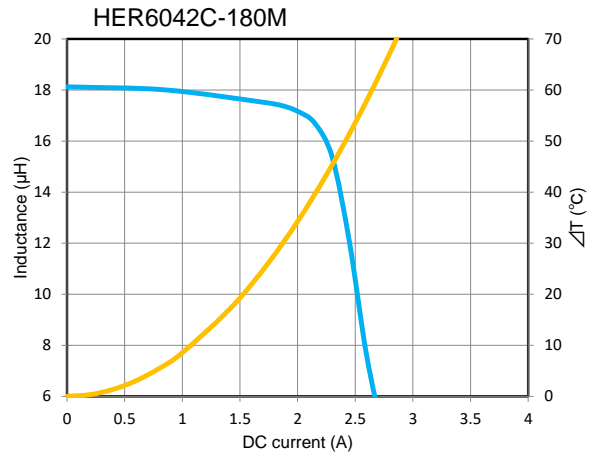
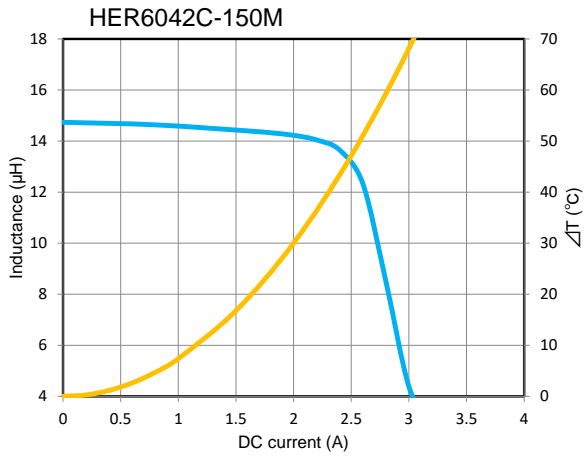
 ΔT



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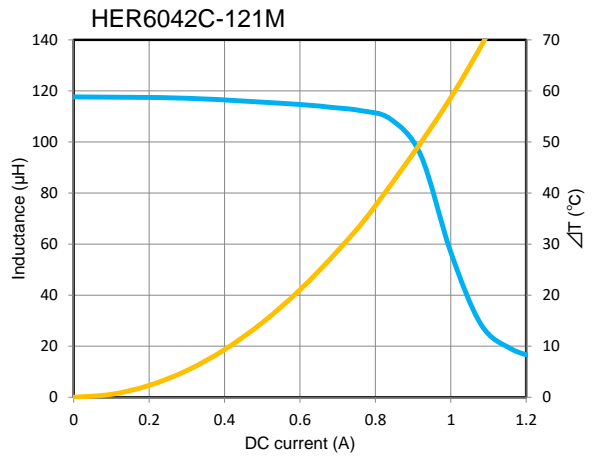
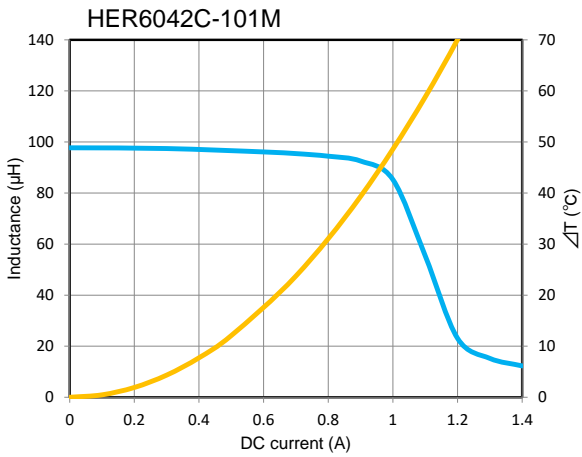
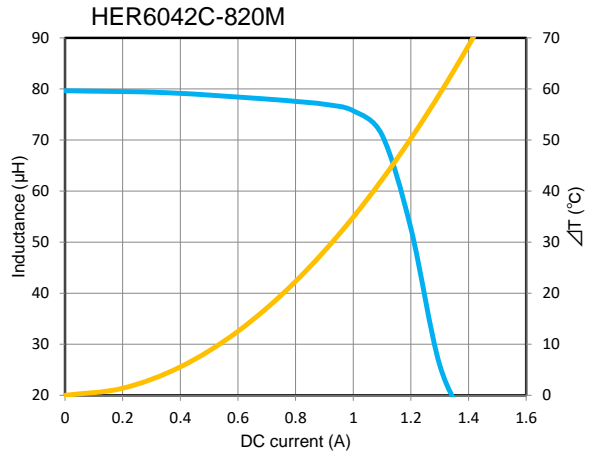
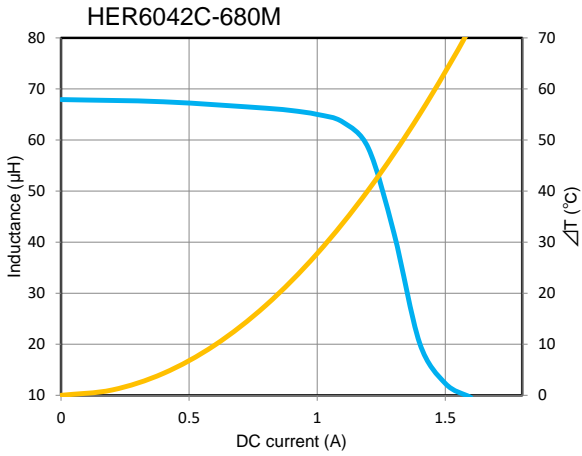
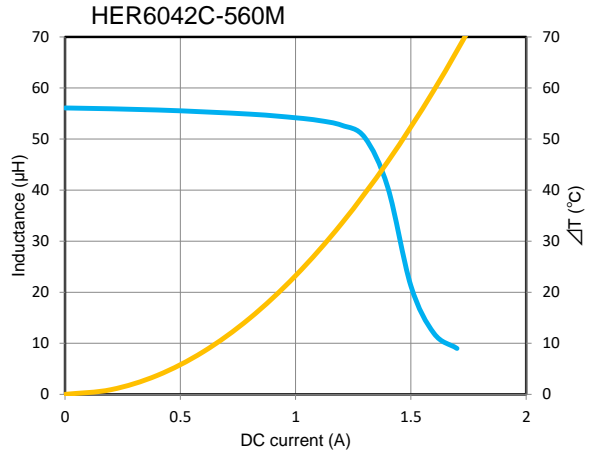
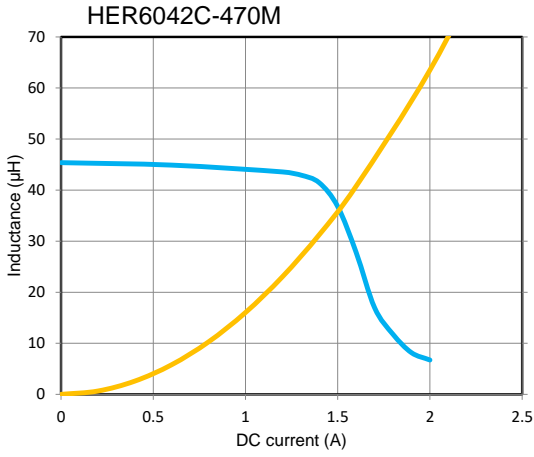
 L(25°C)

 ΔT



DC bias characteristics vs Temperature Rise Graph

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