

CER7042C

AEC-Q200



■ Features

- High reliability available for automotive application.
- SMD magnetic shielded type of power inductor.
- Suitable for power supply choke coil.
- AEC-Q200 compliant
- Operating temperature : -40°C~+150°C(The self-heating is included)

Magnetic structure :

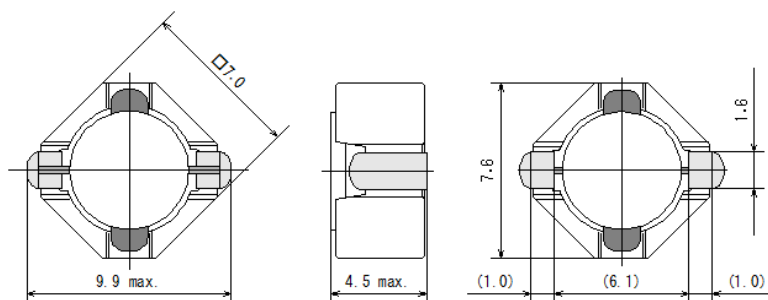


Weight : 0.658 g

■ Applications

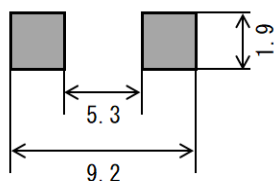
- Automotive/ECU, LED Headlights, Car Audio, Car Navigation
- Others/Medical, Energy, Power Supply, FA

■ Dimensions



(Unit : mm)

■ Recommended Land Pattern



(Unit : mm)



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<https://www.sagami-elec.co.jp>

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■ Specifications

SAGAMI Part No.	Inductance (μ H)	DCR (Ω) $\pm 30\%$	DC Saturation Allowable Current (A)		Temperature Rise Allowable Current (A)	
			Typical	Spec	Typical	Spec
CER7042C-1R2N	1.2 $\pm 30\%$	0.0080	6.65	5.25	7.00	4.70
CER7042C-1R8N	1.8 $\pm 30\%$	0.0090	5.70	4.30	6.20	4.30
CER7042C-2R2N	2.2 $\pm 30\%$	0.0110	5.10	3.90	5.75	4.10
CER7042C-3R0N	3 $\pm 30\%$	0.0120	4.40	3.40	5.60	3.90
CER7042C-3R6N	3.6 $\pm 30\%$	0.0140	3.90	3.05	5.20	3.70
CER7042C-4R3N	4.3 $\pm 30\%$	0.0150	3.55	2.70	4.70	3.40
CER7042C-5R1N	5.1 $\pm 30\%$	0.0190	3.25	2.50	4.25	3.05
CER7042C-6R2N	6.2 $\pm 30\%$	0.0220	3.00	2.35	4.10	2.95
CER7042C-7R5N	7.5 $\pm 30\%$	0.0250	2.70	2.10	3.80	2.60
CER7042C-8R2N	8.2 $\pm 30\%$	0.0320	2.55	1.95	3.30	2.40
CER7042C-100M	10 $\pm 20\%$	0.0360	2.35	1.80	3.20	2.30
CER7042C-120M	12 $\pm 20\%$	0.0450	2.15	1.65	2.75	2.00
CER7042C-150M	15 $\pm 20\%$	0.0510	1.95	1.50	2.55	1.90
CER7042C-180M	18 $\pm 20\%$	0.0640	1.75	1.40	2.25	1.60
CER7042C-220M	22 $\pm 20\%$	0.0790	1.60	1.20	2.05	1.50
CER7042C-270M	27 $\pm 20\%$	0.0840	1.40	1.05	1.90	1.40
CER7042C-330M	33 $\pm 20\%$	0.110	1.30	1.00	1.70	1.20
CER7042C-390M	39 $\pm 20\%$	0.130	1.20	0.900	1.55	1.10
CER7042C-470M	47 $\pm 20\%$	0.150	1.10	0.850	1.40	1.05
CER7042C-560M	56 $\pm 20\%$	0.180	1.00	0.750	1.30	0.900
CER7042C-680M	68 $\pm 20\%$	0.220	0.900	0.700	1.15	0.850
CER7042C-820M	82 $\pm 20\%$	0.270	0.840	0.650	1.05	0.750
CER7042C-101M	100 $\pm 20\%$	0.330	0.760	0.600	0.920	0.700
CER7042C-121M	120 $\pm 20\%$	0.400	0.660	0.520	0.850	0.650
CER7042C-151M	150 $\pm 20\%$	0.490	0.620	0.460	0.760	0.550
CER7042C-181M	180 $\pm 20\%$	0.600	0.560	0.430	0.700	0.500
CER7042C-221M	220 $\pm 20\%$	0.670	0.520	0.410	0.640	0.470
CER7042C-271M	270 $\pm 20\%$	0.830	0.450	0.360	0.570	0.420
CER7042C-331M	330 $\pm 20\%$	1.05	0.410	0.320	0.500	0.360
CER7042C-391M	390 $\pm 20\%$	1.35	0.380	0.290	0.440	0.330
CER7042C-471M	470 $\pm 20\%$	1.49	0.350	0.260	0.420	0.310
CER7042C-561M	560 $\pm 20\%$	1.86	0.310	0.240	0.380	0.270
CER7042C-681M	680 $\pm 20\%$	2.12	0.290	0.210	0.340	0.260
CER7042C-821M	820 $\pm 20\%$	2.67	0.260	0.190	0.300	0.220
CER7042C-102M	1000 $\pm 20\%$	2.98	0.240	0.180	0.280	0.210

Inductance Measuring Condition:100kHz,1V

DC saturation allowable current:The current value which inductance decrease within 30% from the initial value

Temperature rise allowable current:The rise in temperature of core surface is within 40°C



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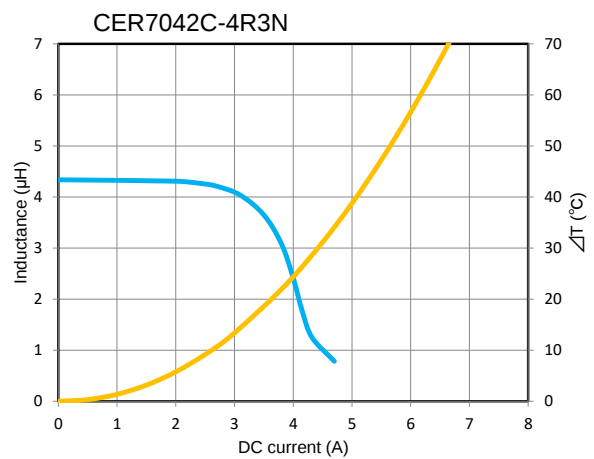
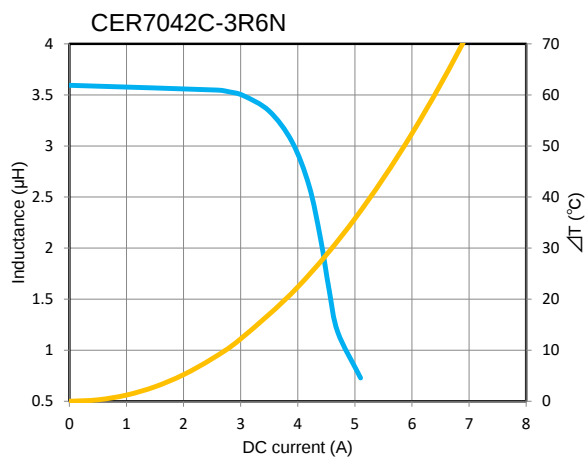
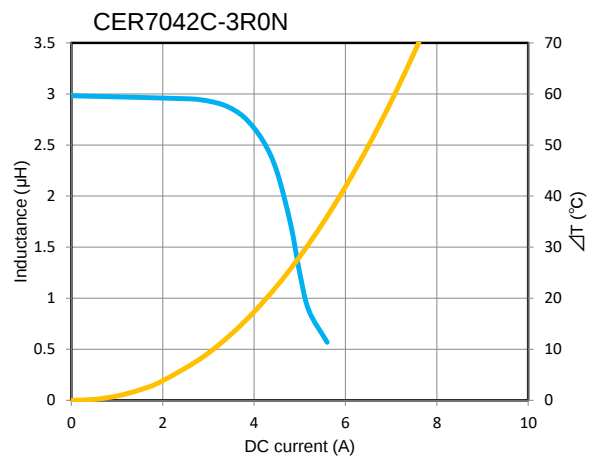
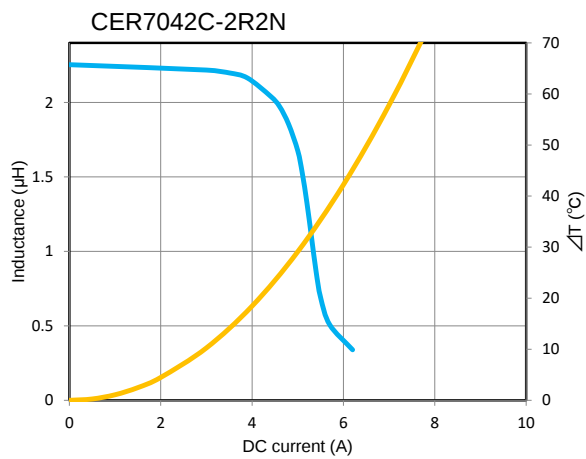
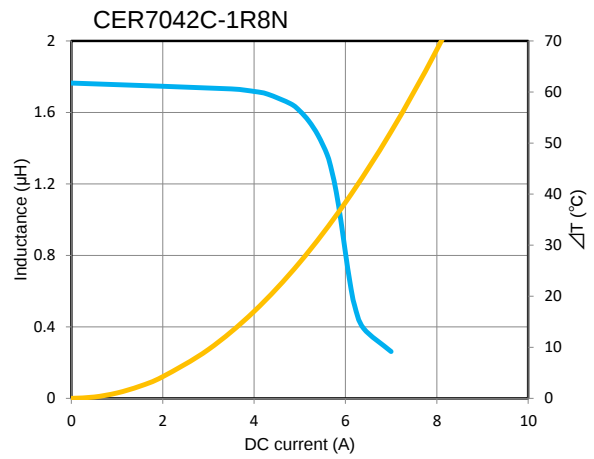
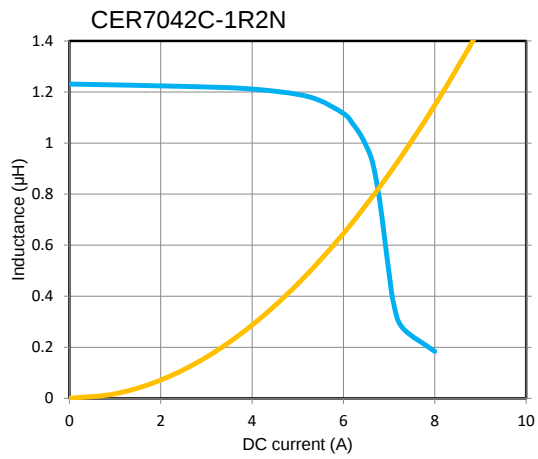
DC bias characteristics vs Temperature Rise Graph



L(25°C)



ΔT



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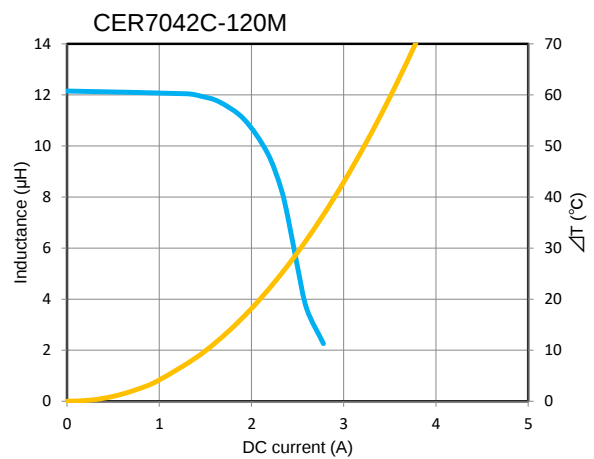
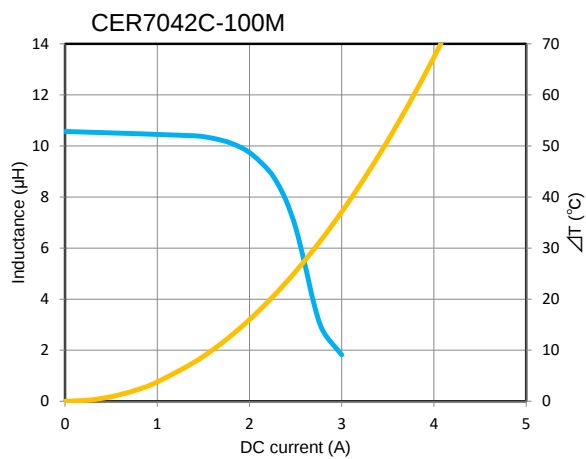
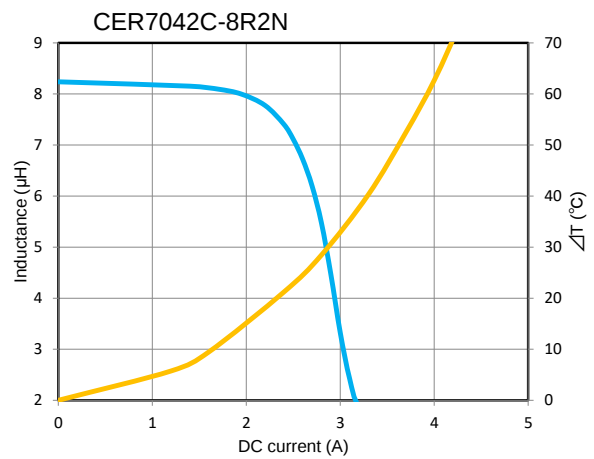
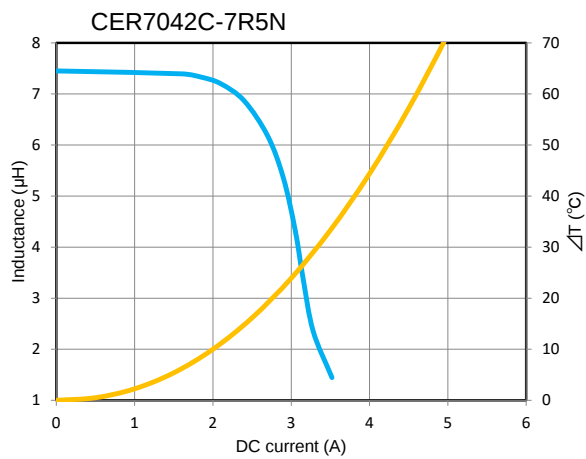
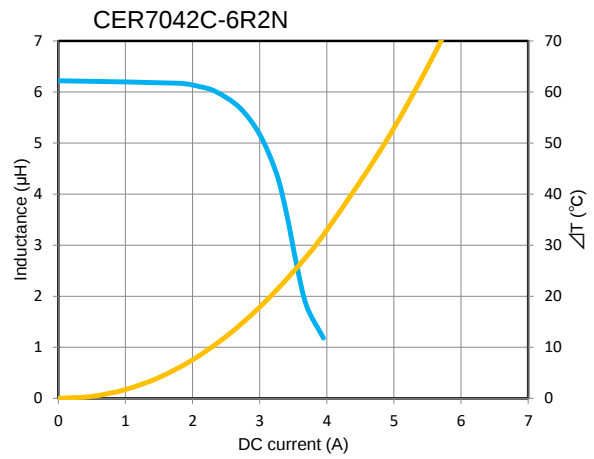
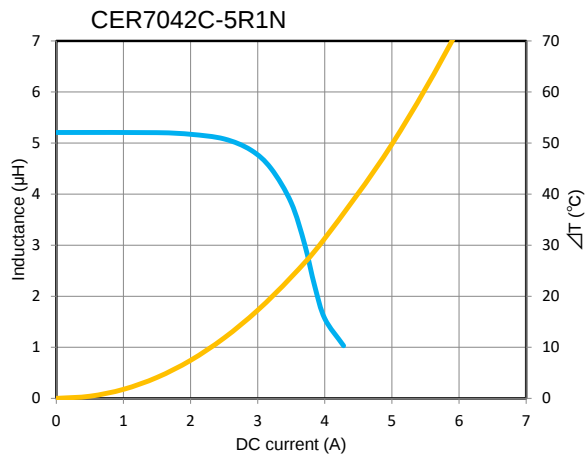
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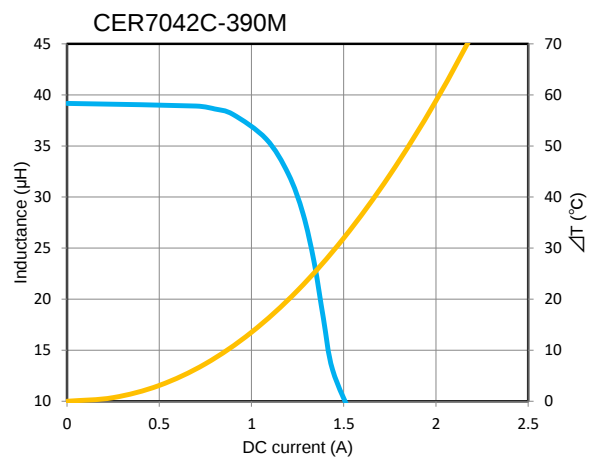
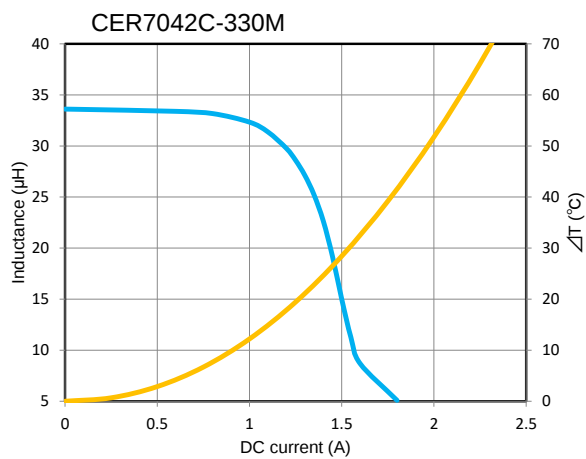
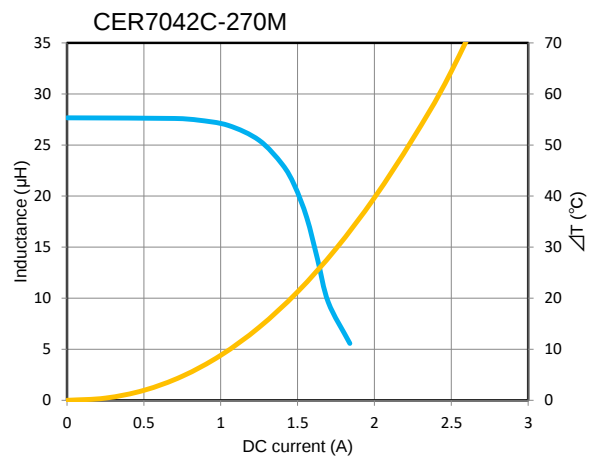
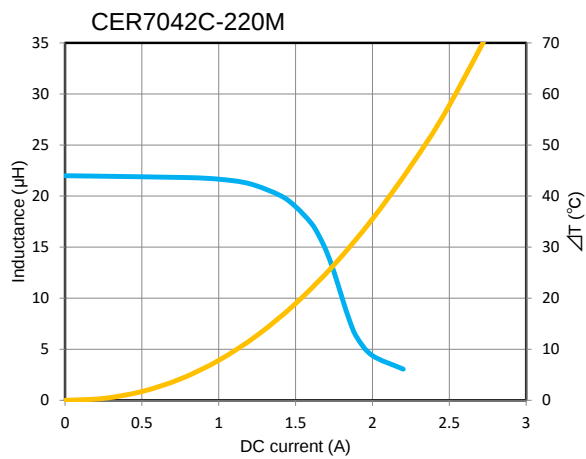
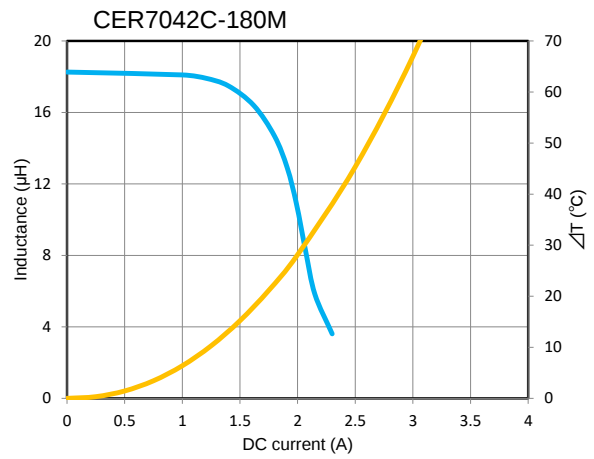
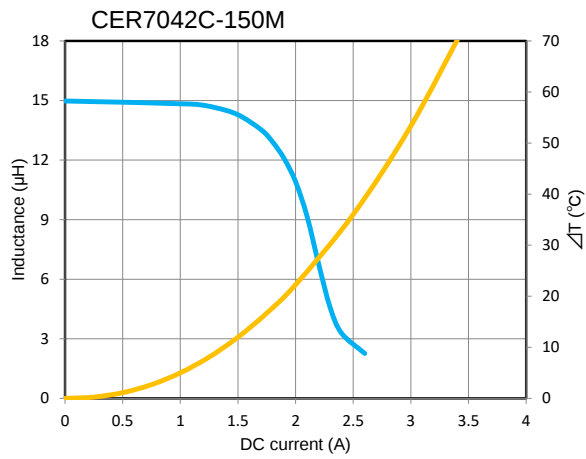
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L(25°C)



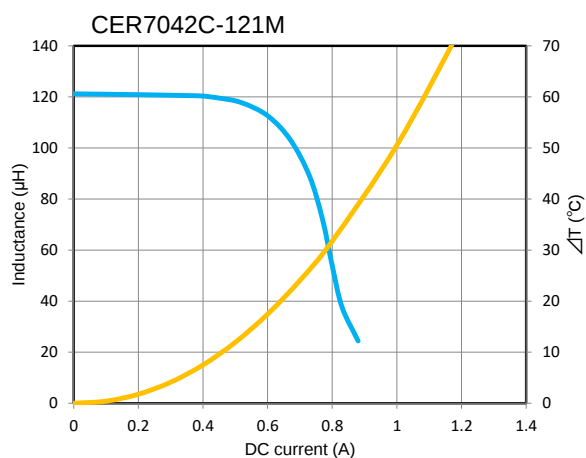
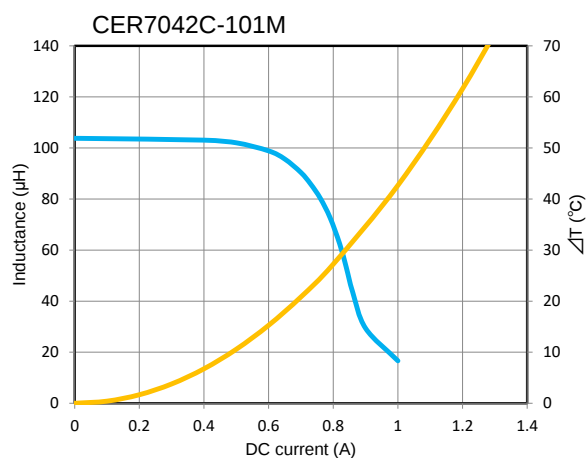
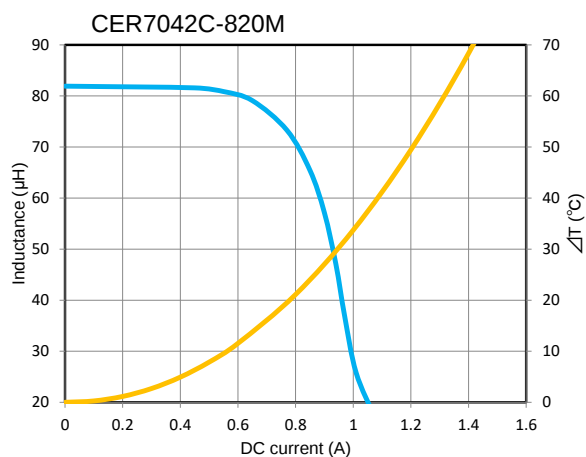
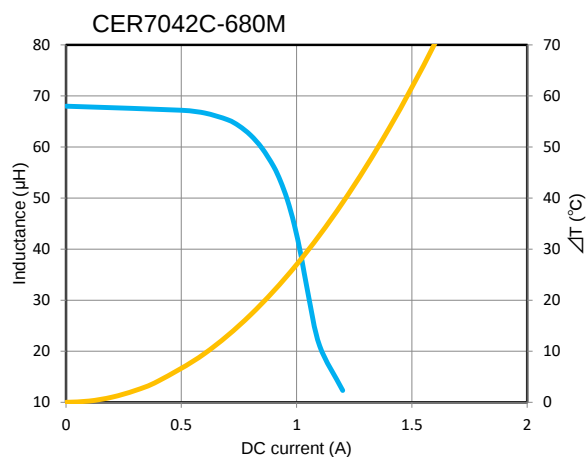
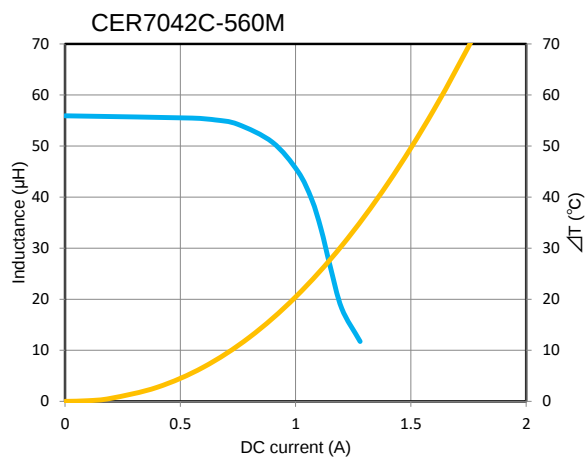
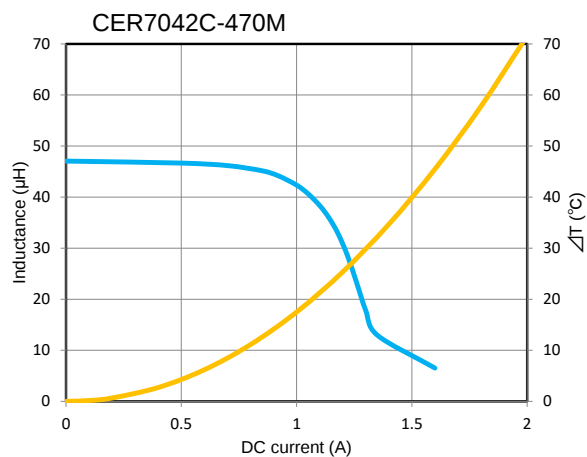
ΔT



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DC bias characteristics vs Temperature Rise Graph

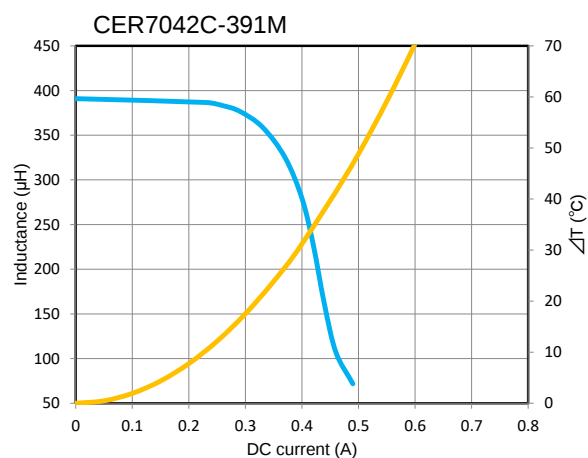
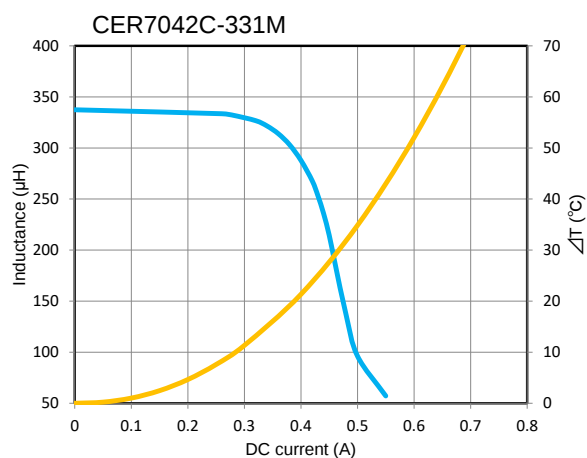
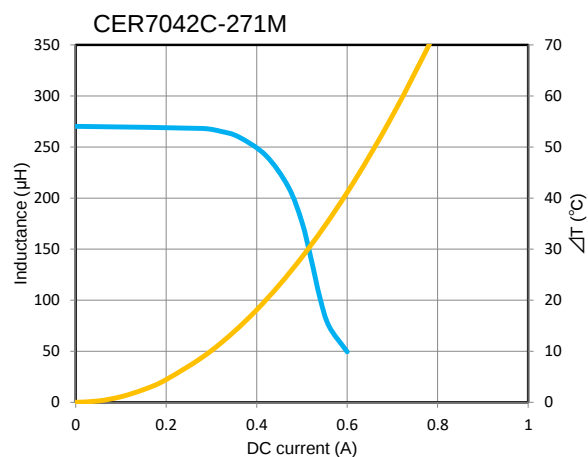
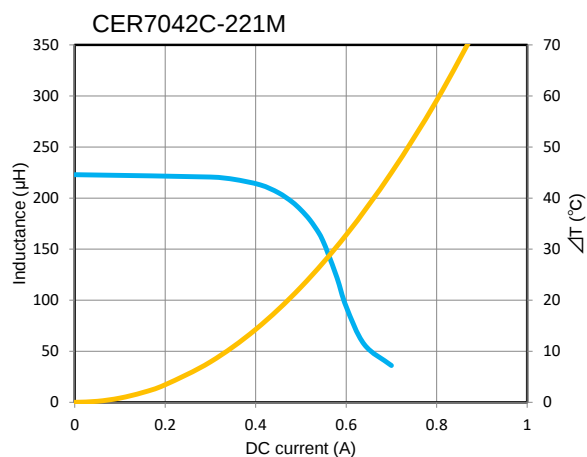
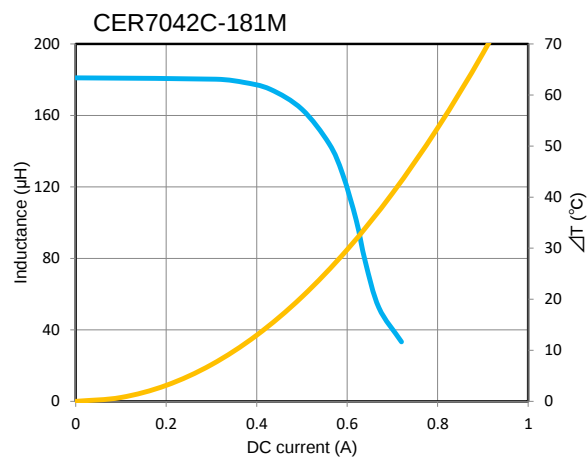
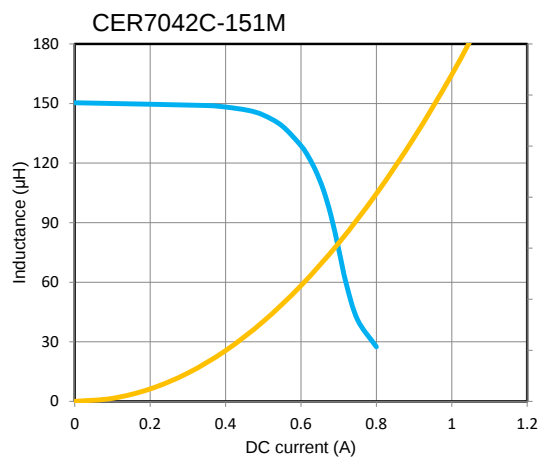
■ L(25°C) ■ ΔT



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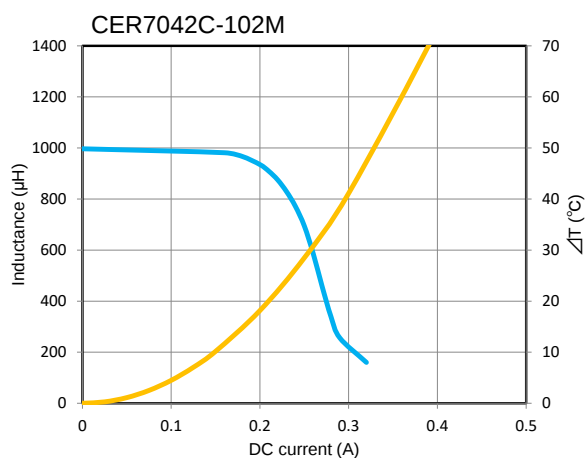
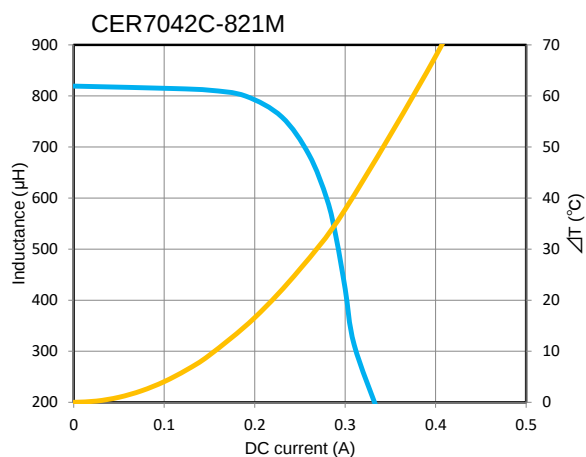
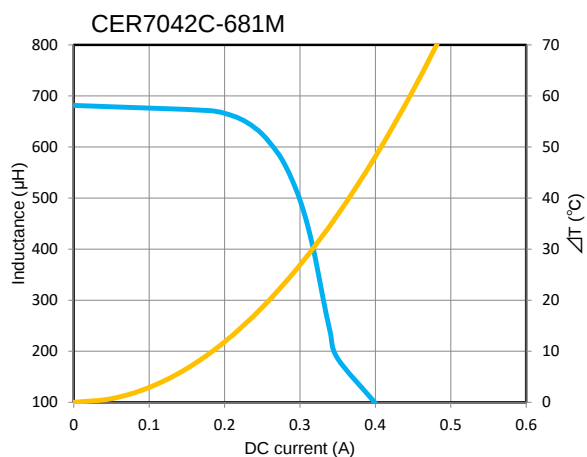
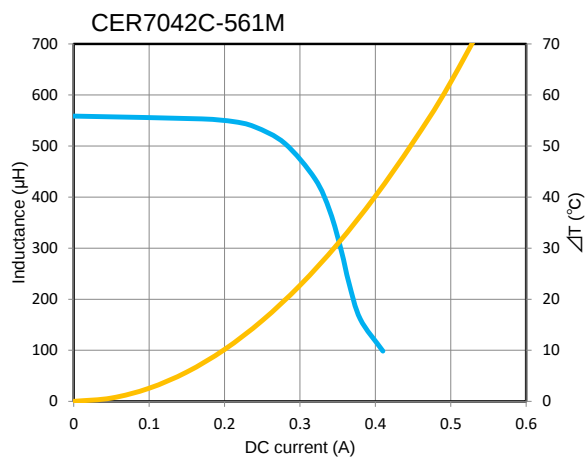
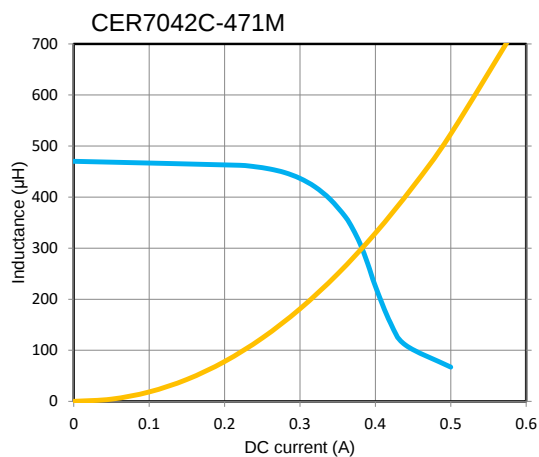
DC bias characteristics vs Temperature Rise Graph

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