

SMD Hybrid Power Inductor

HER4027C

■ Features

- HER4027C is equipped with improved current characteristic.
- The characteristic has **increased 20%** compared to our existing products because of the changed core materials.
- Operating Temperature Range : -40~+150°C (include self-heating)
- **AEC-Q200 compliance**
- RoHS compliance

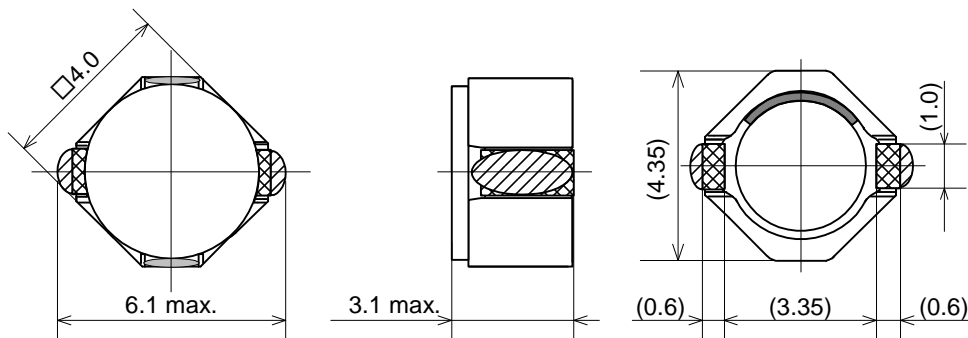


Weight : 0.15g

■ Application

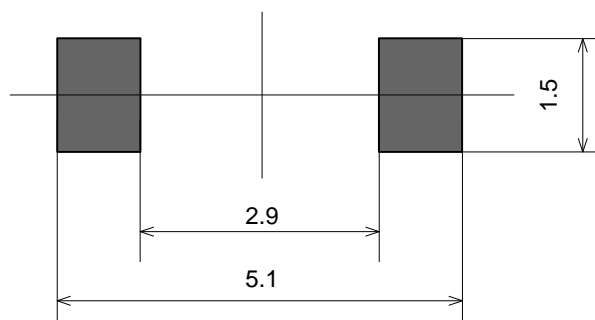
- Electronic devices FOR VEHICLE(LED headlight, ECU, car navigation system and car audio etc.)
- For other high reliability applications

■ Dimensions



(Unit : mm)

■ Recommended Land Pattern



(Unit : mm)



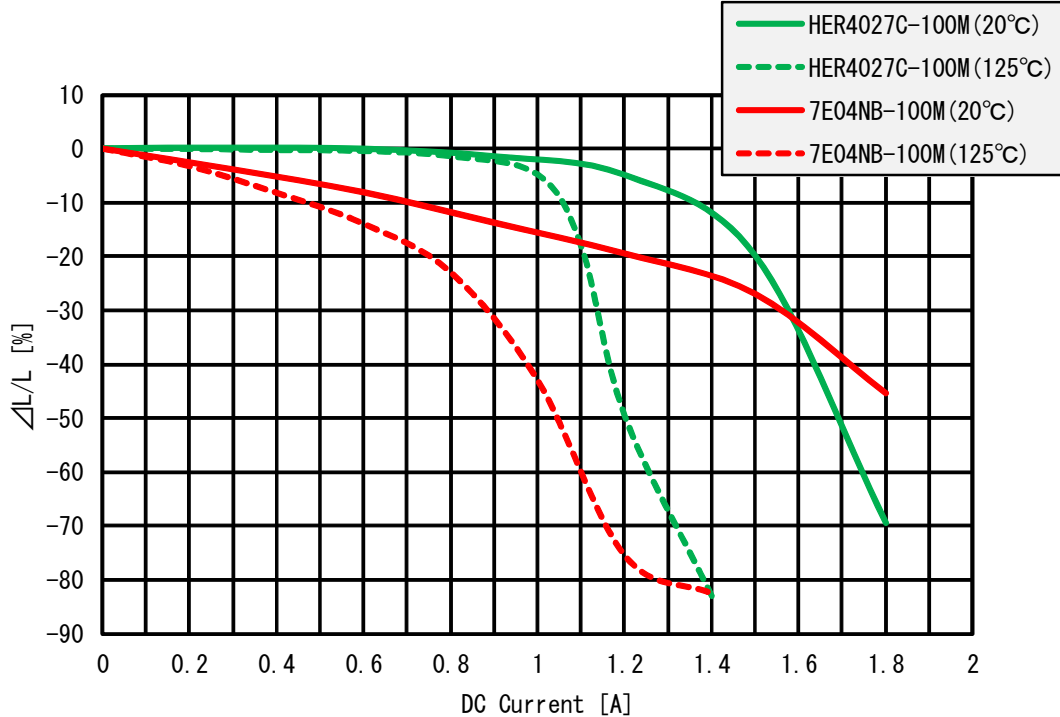
SAGAMI ELEC CO., LTD.
<http://www.sagami-elec.co.jp>

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, E-mail : tech@sagami-elec.co.jp

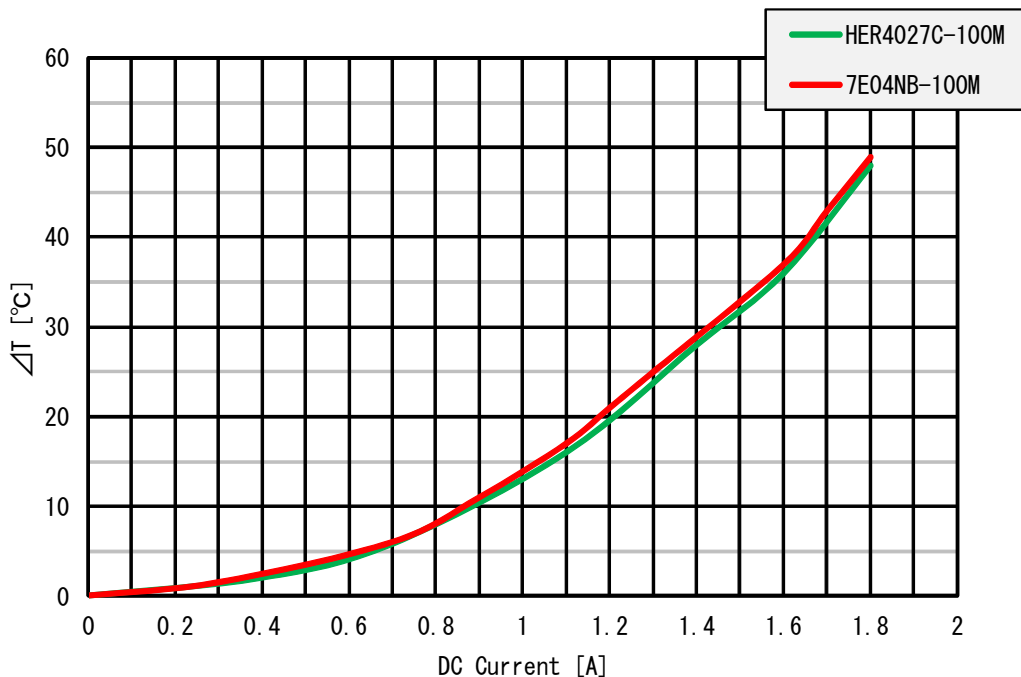
SMD Hybrid Power Inductor

HER4027C vs 7E04NB

■ Characteristics of DC Saturation Current



■ Characteristics of Temperature rise



SAGAMI ELEC CO., LTD.

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

10-30, Ichibashimo-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0024, Japan

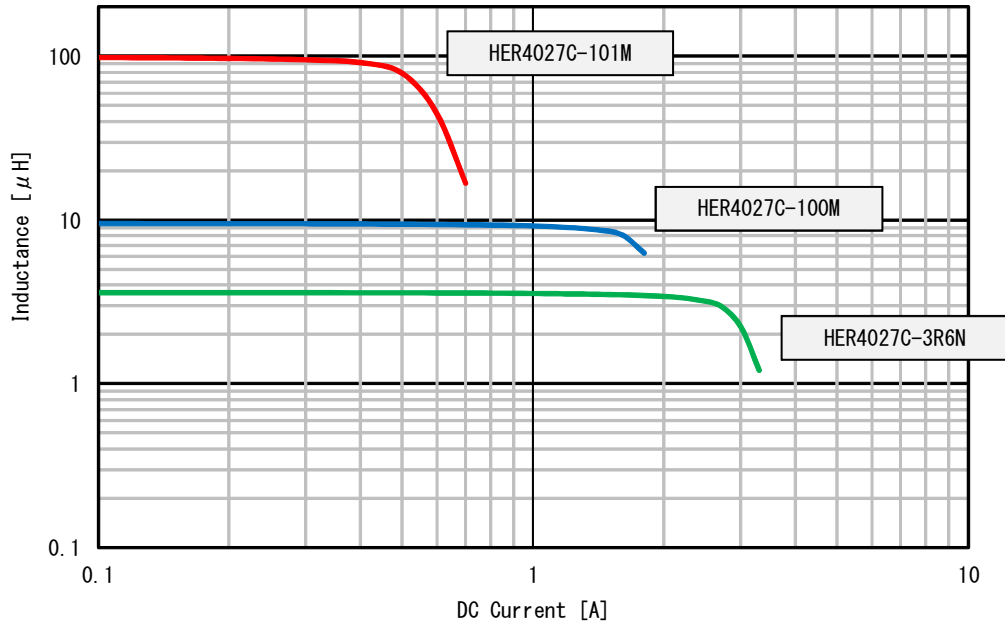
Over Seas Sales Dept. TEL : +81 45 511 3141, E-mail : oss@sagami-elec.co.jp

Engineering Dept. TEL : +81 45 521 4543, E-mail : tech@sagami-elec.co.jp

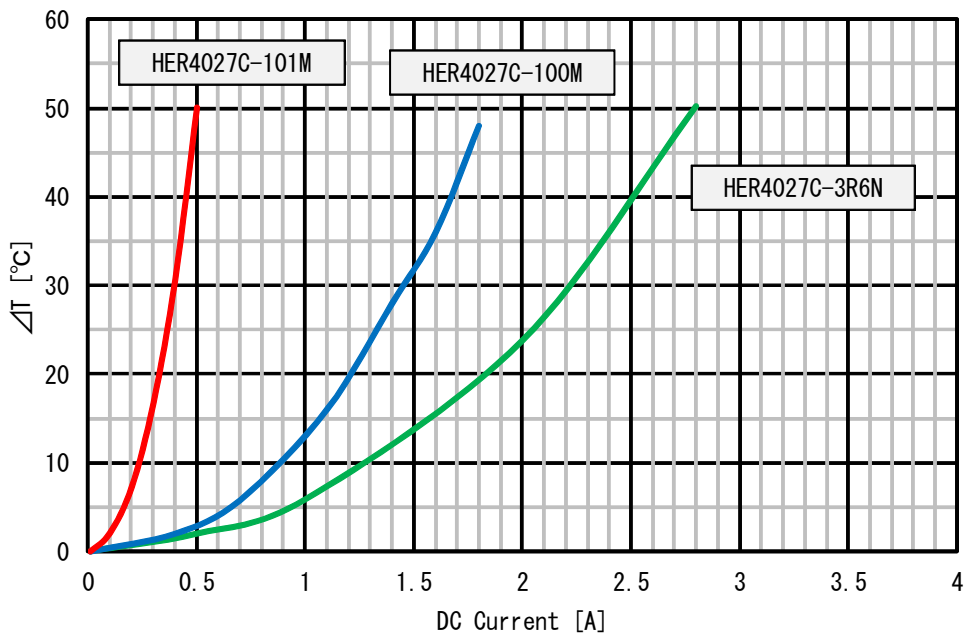
SMD Hybrid Power Inductor

HER4027C Current Characteristic

■ Characteristics of DC Saturation Current



■ Characteristics of Temperature rise



SAGAMI ELEC CO., LTD.

<http://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, E-mail : tech@sagami-elec.co.jp

SMD Hybrid Power Inductor

■ Electrical Specification

P/N	Inductance (μ H)	DC Resistance (Ω)	DC Superposition Allowable Current(A)		Temperature Rise Allowable Current(A)	
			Typical	Spec.	Typical	Spec.
HER4027C-1R0N	1.0 \pm 30%	0.017 \pm 30%	5.60	3.90	4.07	3.20
HER4027C-1R5N	1.5 \pm 30%	0.020 \pm 30%	4.50	3.40	3.60	2.95
HER4027C-1R8N	1.8 \pm 30%	0.023 \pm 30%	4.07	3.00	3.35	2.75
HER4027C-2R4N	2.4 \pm 30%	0.027 \pm 30%	3.50	2.50	3.00	2.45
HER4027C-3R6N	3.6 \pm 30%	0.034 \pm 30%	2.90	2.15	2.50	2.00
HER4027C-4R3N	4.3 \pm 30%	0.040 \pm 30%	2.73	2.00	2.30	1.85
HER4027C-5R1N	5.1 \pm 30%	0.048 \pm 30%	2.44	1.80	2.10	1.70
HER4027C-6R8N	6.8 \pm 30%	0.063 \pm 30%	2.20	1.55	1.80	1.45
HER4027C-8R2N	8.2 \pm 30%	0.074 \pm 30%	1.98	1.40	1.70	1.35
HER4027C-100M	10 \pm 20%	0.086 \pm 30%	1.86	1.30	1.45	1.20
HER4027C-120M	12 \pm 20%	0.11 \pm 30%	1.69	1.20	1.40	1.15
HER4027C-150M	15 \pm 20%	0.13 \pm 30%	1.48	1.05	1.25	1.00
HER4027C-180M	18 \pm 20%	0.16 \pm 30%	1.36	0.95	1.10	0.90
HER4027C-220M	22 \pm 20%	0.21 \pm 30%	1.27	0.90	1.00	0.82
HER4027C-270M	27 \pm 20%	0.24 \pm 30%	1.11	0.80	0.92	0.73
HER4027C-330M	33 \pm 20%	0.30 \pm 30%	0.95	0.70	0.81	0.64
HER4027C-390M	39 \pm 20%	0.33 \pm 30%	0.91	0.65	0.77	0.61
HER4027C-470M	47 \pm 20%	0.42 \pm 30%	0.81	0.60	0.71	0.52
HER4027C-560M	56 \pm 20%	0.53 \pm 30%	0.74	0.55	0.61	0.48
HER4027C-680M	68 \pm 20%	0.61 \pm 30%	0.72	0.50	0.57	0.44
HER4027C-820M	82 \pm 20%	0.78 \pm 30%	0.62	0.45	0.49	0.38
HER4027C-101M	100 \pm 20%	0.88 \pm 30%	0.53	0.40	0.45	0.36

* Inductance Measurement Condition : 100kHz,1V(\sim 8.2 μ H), 1kHz,1V(10 μ H \sim)

* Rated Current : DC superposition allowable current or temperature rise allowable current, whichever is the smaller value.

1. DC Superposition Allowable Current : Value **within -30%** of initial inductance value

2. Temperature Rise Allowable Current : Value that a rise in temperature of core surface is **below 40°C**



SAGAMI ELEC CO., LTD.

<http://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 : oss@sagami-elec.co.jp

Engineering Dept. TEL : +81 45 521 4543, E-mail : tech@sagami-elec.co.jp