

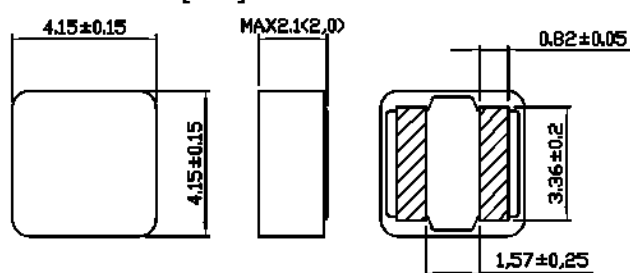
Features

- Metal Hybrid Inductor
- Magnetically shielded.
- Suitable for Large Current
- Size: 4.2 x 4.2 x H2.1 mm Max.
- Product weight: 0.18g (Ref.)
- Halogen Free available
- Operating temperature range: - 40deg C ~ +125deg C
(Not including coil's self temperature rise)

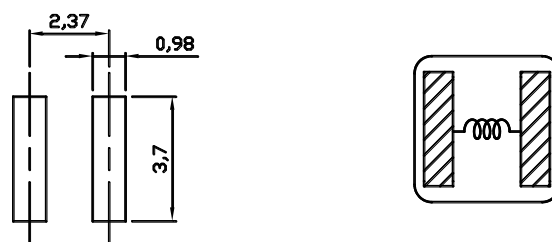
Applications

- Telecommunication base station , Server , SSD,
and other low profile high current application.

Dimension - [mm]



Reference Land pattern - [mm] Schematics - [mm]



Electrical Characteristics

Part No.	Inductance (μH) (±30%) * 1	D.C.R (mΩ) Typ. (Max.)	Saturation Current (A) 20degC * 2	Temperature Rise current (A) * 3	
				* 4	* 5
CDMT40D20HF-R27NC	0.27	5.80 (6.40)	17.2	7.50	16.8
CDMT40D20HF-R47NC	0.47	7.50 (8.30)	11.4	6.80	14.0
CDMT40D20HF-R63NC	0.63	9.4 (10.3)	10.4	6.10	11.7
CDMT40D20HF-1R0NC	1.00	13.2 (14.5)	8.70	5.40	9.60
CDMT40D20HF-1R5NC	1.50	19.5 (21.5)	7.10	4.40	7.50
CDMT40D20HF-2R2NC	2.20	28.0 (30.8)	5.60	3.50	5.50
CDMT40D20HF-3R3NC	3.30	42.0 (46.2)	4.30	3.00	4.60
CDMT40D20HF-4R7NC	4.70	59.0 (64.9)	3.70	2.50	3.50

* 1 Inductance Measuring frequency: 100kHz

* 2 Saturation current: DC current which becomes inductance value drop down by 10% from the nominal value.

* 3 Temperature rise current : DC current which becomes $\Delta T=40\text{deg C}$ in temperature rise of coil ($T_a=20\text{ deg C}$).

* 4 Measurement condition: Irms testing was performed by a product in 25°C ambient.

* 5 Measurement condition: Irms testing was performed on copper traces in 25°C ambient.

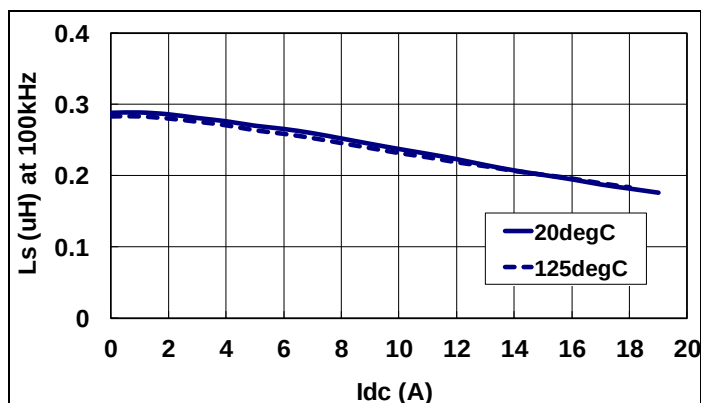
* * Discharge static electricity before handling this coil.

Take the static electricity measures to prevent deterioration of electric characteristic

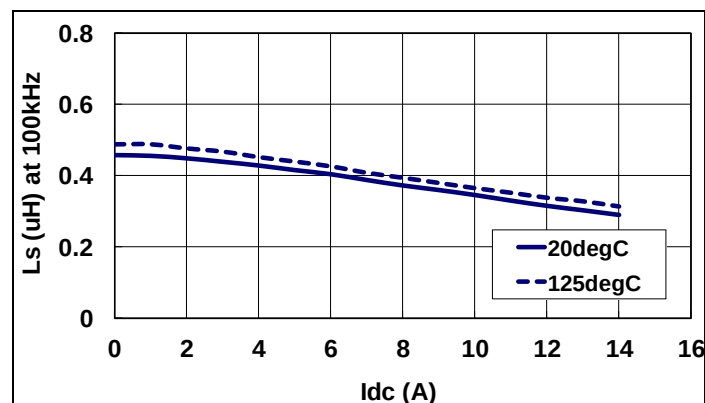
* * * For only CDMT40D20HF-4R7NC will be started mass production from March 2016. Others are available for mass production.

Note: This datasheet might be slightly modified without notice in order to improve the quality and reliability of the product. Please contact an appropriate our sales in your regions for checking final spec before you place an order.

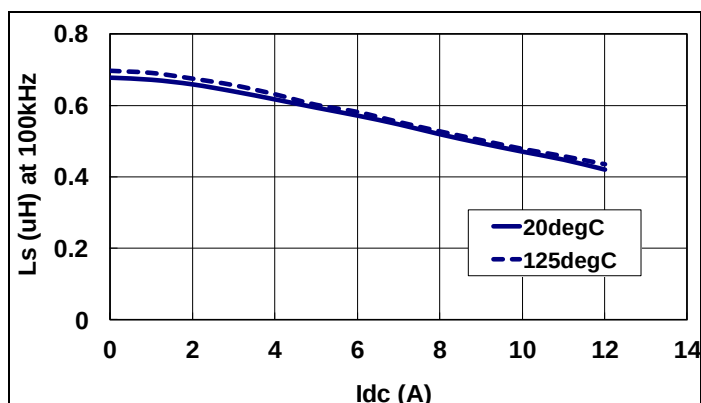
CDMT40D20HF-R27NC



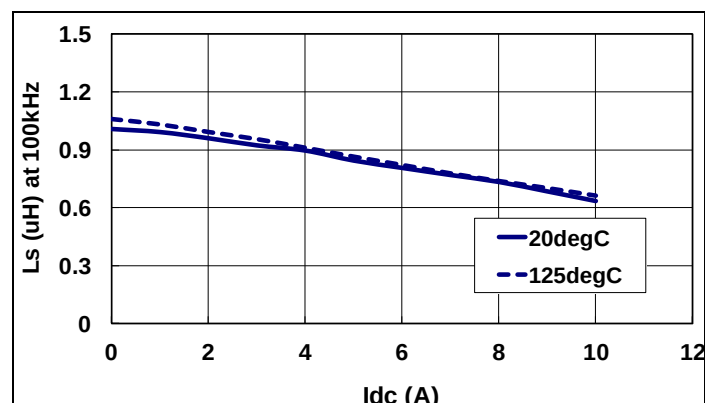
CDMT40D20HF-R47NC



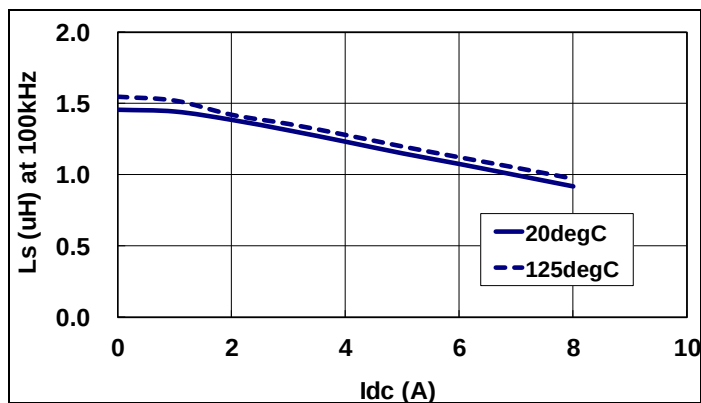
CDMT40D20HF-R63NC



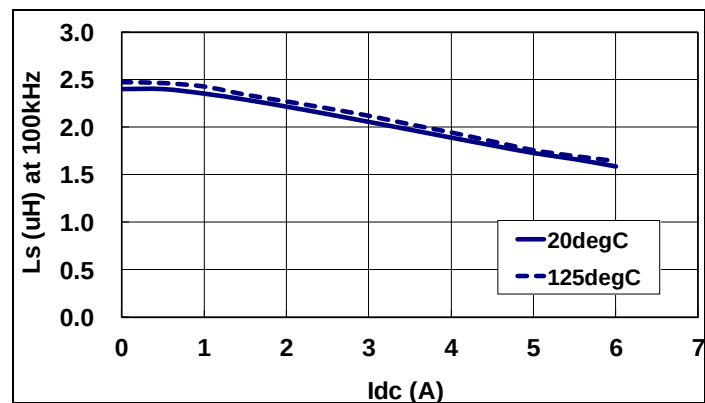
CDMT40D20HF-1R0NC



CDMT40D20HF-1R5NC

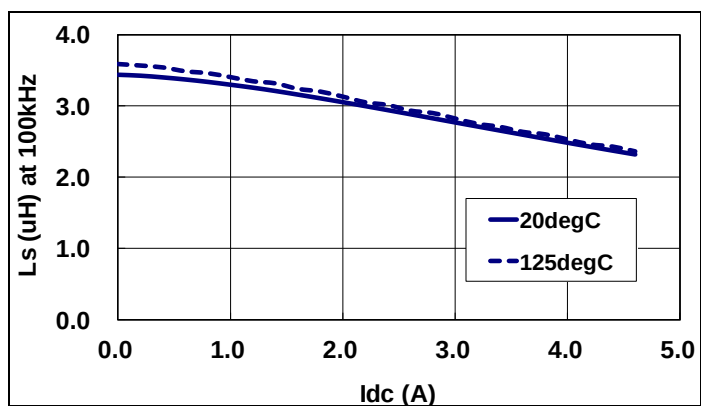


CDMT40D20HF-2R2NC

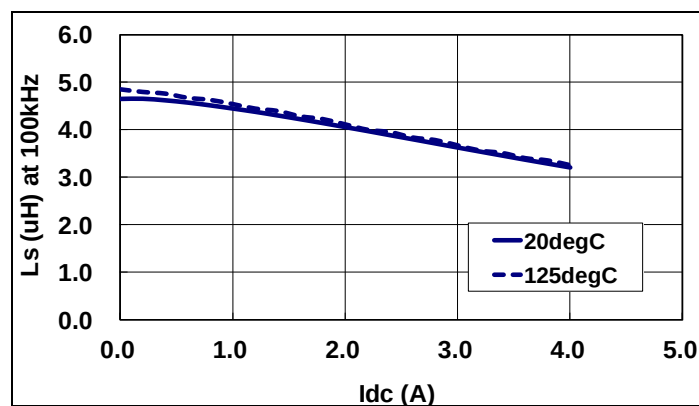


Note: This datasheet might be slightly modified without notice in order to improve the quality and reliability of the product. Please contact an appropriate our sales in your regions for checking final spec before you place an order.

CDMT40D20HF-3R3NC

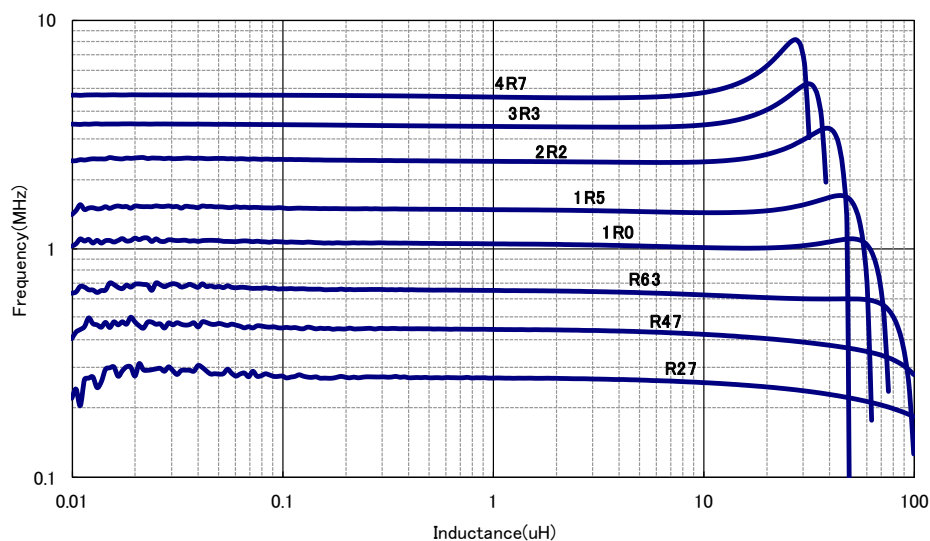


CDMT40D20HF-4R7NC

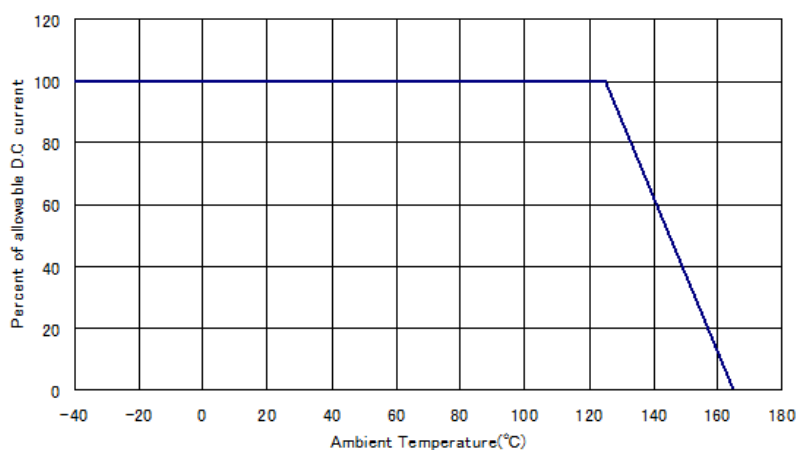


Note: This datasheet might be slightly modified without notice in order to improve the quality and reliability of the product. Please contact an appropriate our sales in your regions for checking final spec before you place an order.

Inductance vs Frequency Graph



Derating Curve (Temperature Rise Current)



Please refer to the sales offices on our website - <http://www.sumida.com>

Hong Kong

Tel.+852-2880-6781
FAX.+852-2565-9600
sales@hk.sumida.com

Shanghai

Tel.+86-021-5836-3299
FAX.+86-021-5836-3266
shanghai.sales@cn.sumida.com

Shenzhen

Tel.+86-755-8291-0228
FAX.+86-755-8291-0338
shenzhen.sales@cn.sumida.com

Taipei

Tel.+886-2-8751-2737
FAX.+886-2-8751-2738
sales@tw.sumida.com

Kawasaki (Japan)

Tel.+81-44-578-2100
FAX.+81-44-578-2105
sales@jp.sumida.com

Seoul

Tel.+82-2-6237-0777
FAX.+82-2-6237-0778
sales@kr.sumida.com

Singapore

Tel.+65-6296-3388
FAX.+65-6296-3390
sales@sg.sumida.com

San Jose

Tel.+1-408-3219660
FAX.+1-408-321-9308
sales@us.sumida.com

Chicago

Tel.+1-847-545-6700
FAX. +1-847-545-6720
sales@us.sumida.com

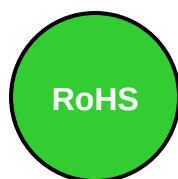
Obernzell

Tel.+49-8591-937-0
FAX. +49-8591-937-103
contact@sumida-eu.com

Neumarkt

Tel.+49-9181-4509-110
FAX. +49-9181-4509-310
infocomp@eu.sumida.com

Note: This datasheet might be slightly modified without notice in order to improve the quality and reliability of the product. Please contact an appropriate our sales in your regions for checking final spec before you place an order.



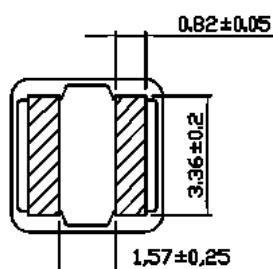
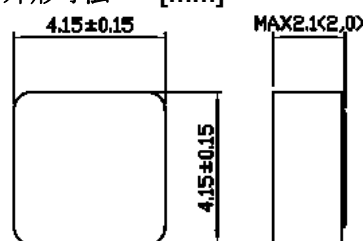
特性

- ・ メタルハイブリッドインダクタ
- ・ 閉磁構造
- ・ 大電流対応
- ・ サイズ: 4.2 x 4.2 x H2.1 mm Max.
- ・ 製品重量: 0.18g (参考値)
- ・ ハロゲンフリー
- ・ リフロー半田温度: 260°Cピーク
- ・ 動作温度範囲: - 40deg C ~ +125deg C
(コイル自己発熱を含まず)

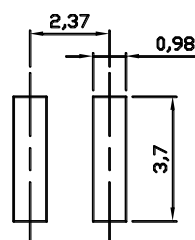
用途

- ・ 基地局、サーバー、SSD、低背大電流仕様

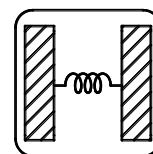
外形寸法 - [mm]



推奨ランド寸法 - [mm]



結線図 - [mm]



電気的特性

Part No.	Inductance (μH) (±30%) *1	D.C.R (mΩ) Typ. (Max.)	Saturation Current (A) 20degC *2	Temperature Rise current (A) *3	
				*4	*5
CDMT40D20HF-R27NC	0.27	5.80 (6.40)	17.2	7.50	16.8
CDMT40D20HF-R47NC	0.47	7.50 (8.30)	11.4	6.80	14.0
CDMT40D20HF-R63NC	0.63	9.4 (10.3)	10.4	6.10	11.7
CDMT40D20HF-1R0NC	1.00	13.2 (14.5)	8.70	5.40	9.60
CDMT40D20HF-1R5NC	1.50	19.5 (21.5)	7.10	4.40	7.50
CDMT40D20HF-2R2NC	2.20	28.0 (30.8)	5.60	3.50	5.50
CDMT40D20HF-3R3NC	3.30	42.0 (46.2)	4.30	3.00	4.60
CDMT40D20HF-4R7NC	4.70	59.0 (64.9)	3.70	2.50	3.50

*1 測定条件: 100kHz

*2 直流重畳許容電流: 直流電流を流した時、インダクタンスが公称値の 70%以上となる電流値とする。

*3 温度上昇許容電流: 直流電流を流した時、コイルの温度上昇が ΔT=40°Cとなる実力値とする。(Ta=20°C)

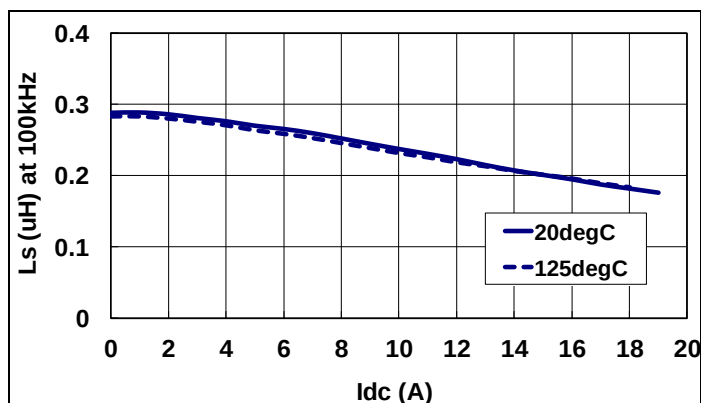
*4 測定条件; Irms 試験値は 25°Cの環境での製品実力値。

*5 測定条件; Irms 試験値は 25°Cの環境、銅板上での製品実力値。

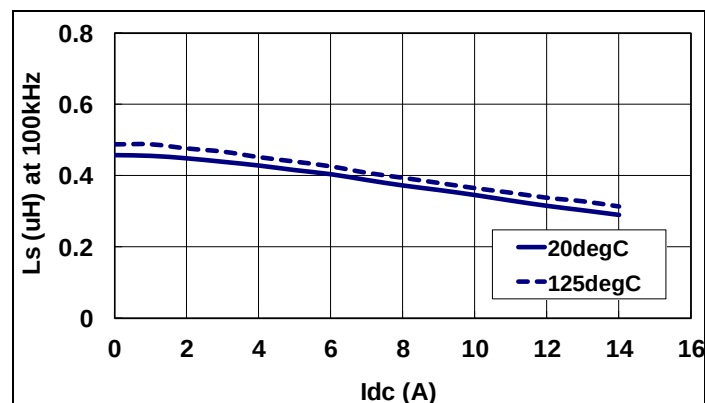
** 静電気により耐電圧劣化発生の恐れがあります。コイルの取り扱いには静電気対策を実施下さい。

*** CDMT40D20HF-4R7NC に関しては、2016 年 3 月から量産対応予定です。他は量産対応可能です。

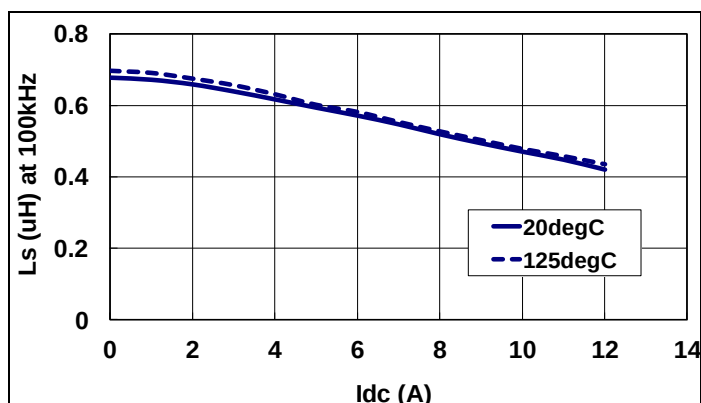
CDMT40D20HF-R27NC



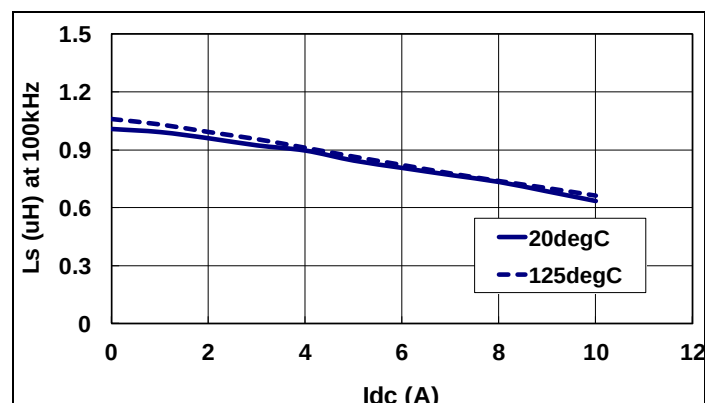
CDMT40D20HF-R47NC



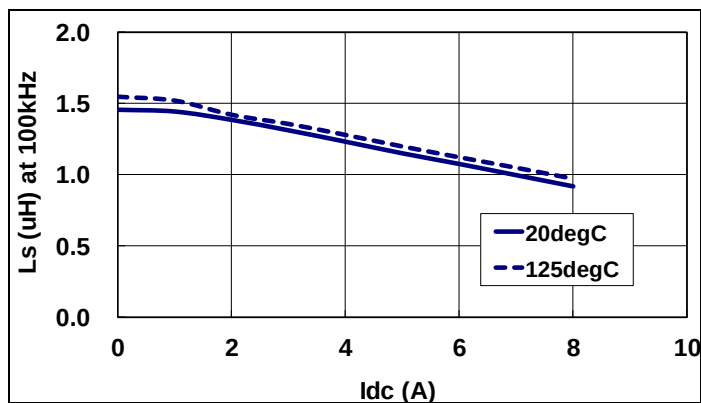
CDMT40D20HF-R63NC



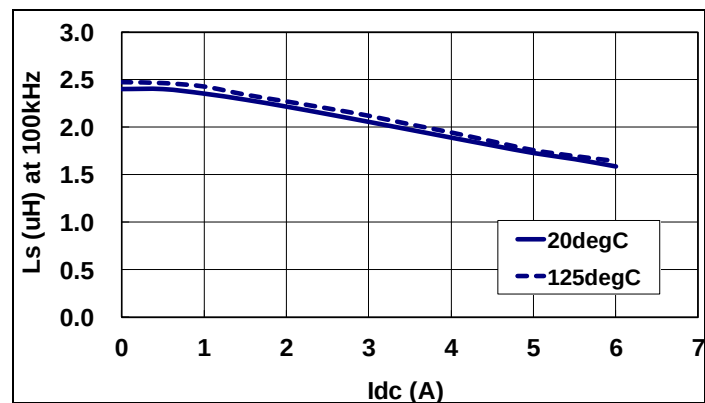
CDMT40D20HF-1R0NC



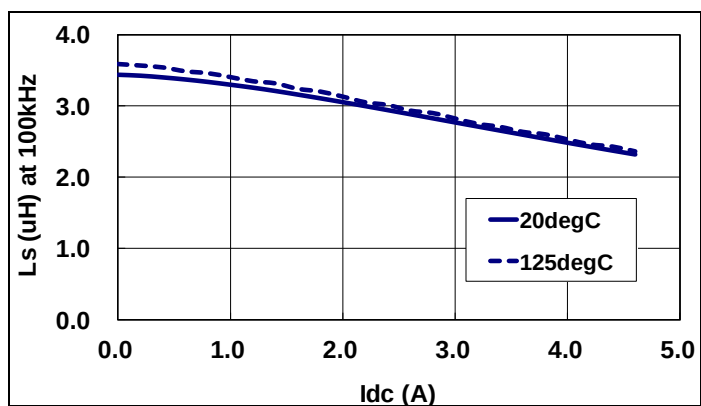
CDMT40D20HF-1R5NC



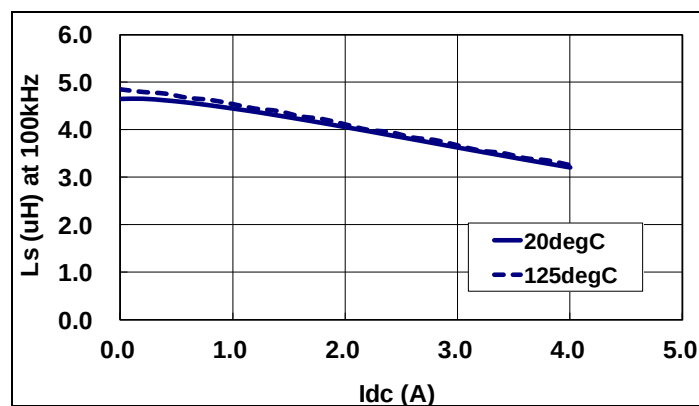
CDMT40D20HF-2R2NC



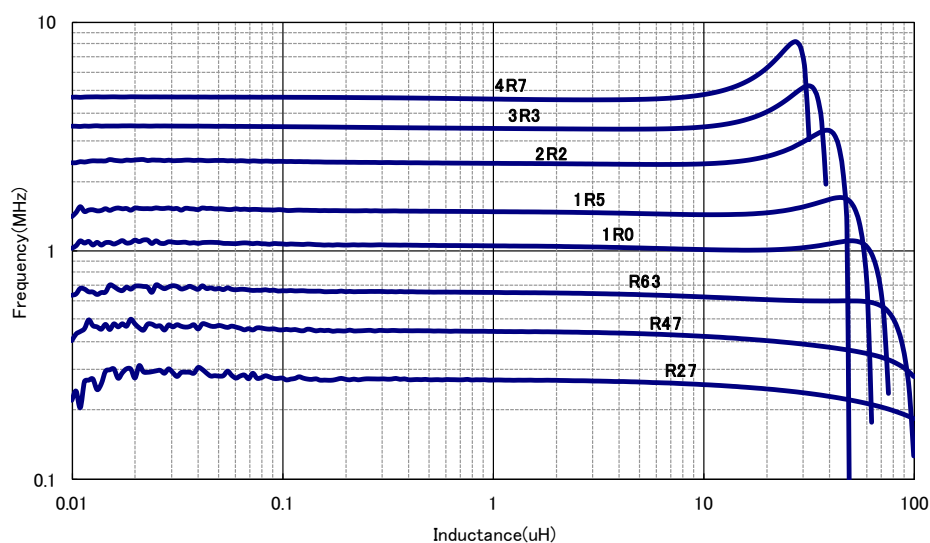
CDMT40D20HF-3R3NC



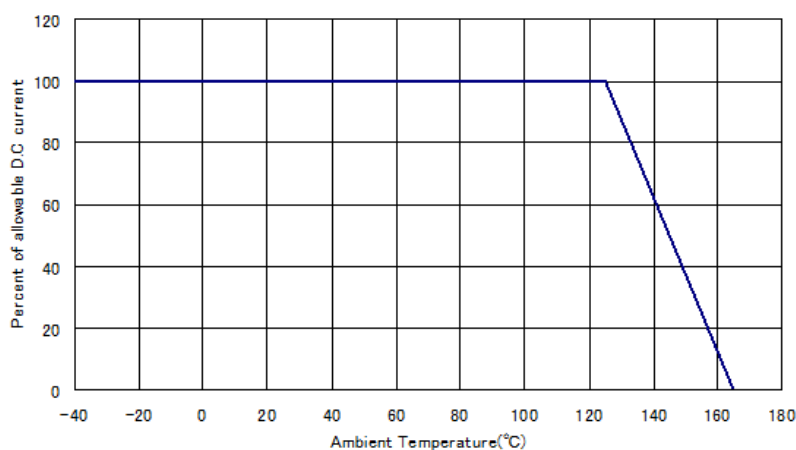
CDMT40D20HF-4R7NC



Inductance vs Frequency Graph



Derating Curve (Temperature Rise Current)



【スミダ電機株式会社】 - <http://www.sumida.com>

お問い合わせ先は下記地域営業までご連絡ください。

東北営業

〒981-1226 宮城県名取市植松字宮島 31-1

TEL: 022-381-6606 FAX: 022-381-6616

tohoku.sales@jp.sumida.com

北関東営業

〒330-0075 埼玉県さいたま市浦和区針ヶ谷 4-2-20

住友生命浦和テクノシティビル 5 階

TEL: 048-691-7303 FAX: 048-691-7340

sales@jp.sumida.com

首都圏営業

〒210-000 神奈川県川崎市川崎区砂子 1-2-4

川崎砂子ビルディング 2 階

TEL: 044-578-2100 FAX: 044-578-2105

sales@jp.sumida.com

大阪営業

〒532-0003 大阪府大阪市淀川区宮原 3-5-36

新大阪トラストタワー12 階

TEL: 06-6391-8855 FAX: 06-6391-8877

osaka.sales@jp.sumida.com

名古屋営業

〒460-0024 愛知県名古屋市中区正木 4-8-7

れんが橋ビル 7 階

TEL: 052-680-1277 FAX: 052-680-1288

nagoya.sales@jp.sumida.com

長野営業

〒384-0801 長野県小諸市甲上郷土 4127-3

TEL: 0267-23-2501 FAX: 0267-23-2504

nagano.sales@jp.sumida.com