

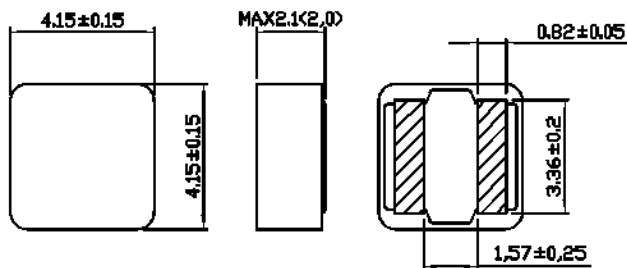
### Features

- 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)

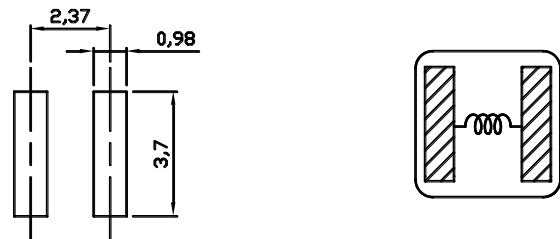
### Applications

- 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.

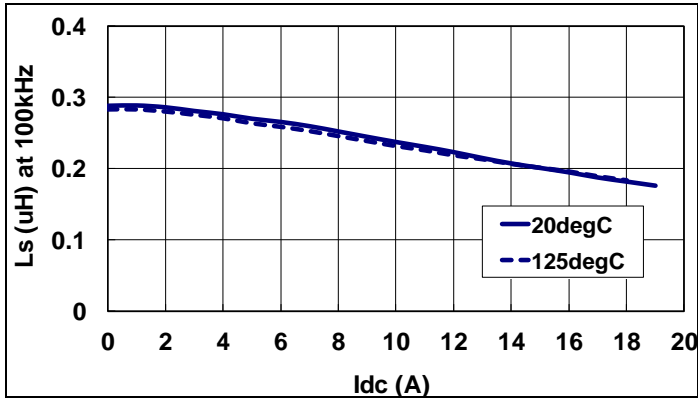
\*\* Discharge static electricity before handling this coil.

Take the static electricity measures to prevent deterioration of electric characteristic

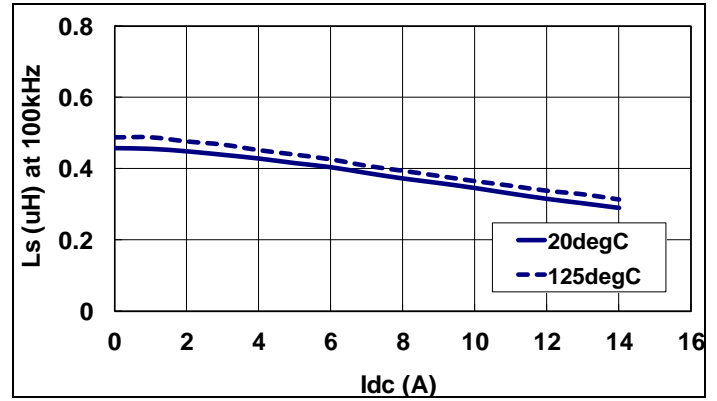
\*\*\* For only CDMT40D20HF-4R7NC will be started mass production from March 2016. Others are available for mass production.

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.

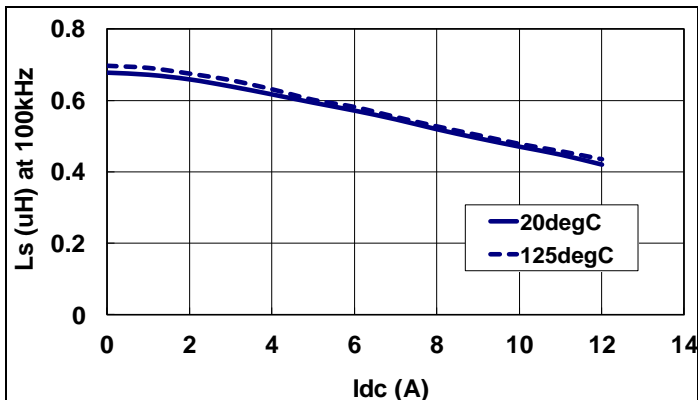
CDMT40D20HF-R27NC



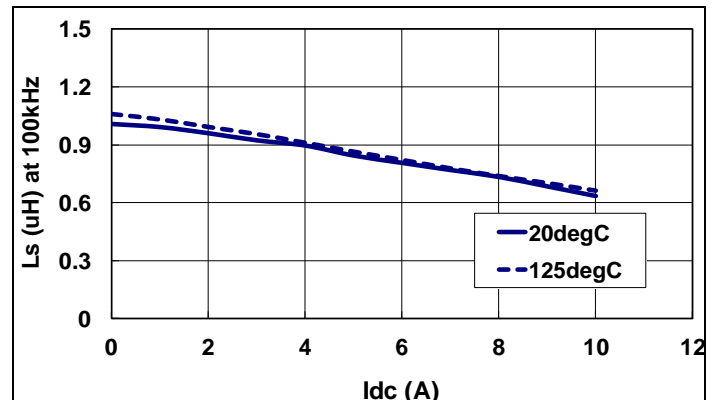
CDMT40D20HF-R47NC



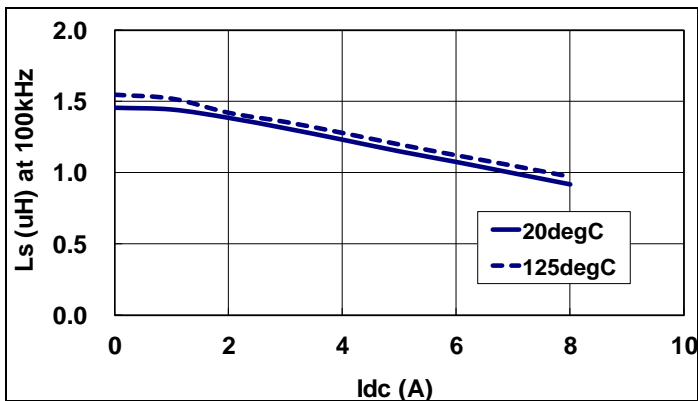
CDMT40D20HF-R63NC



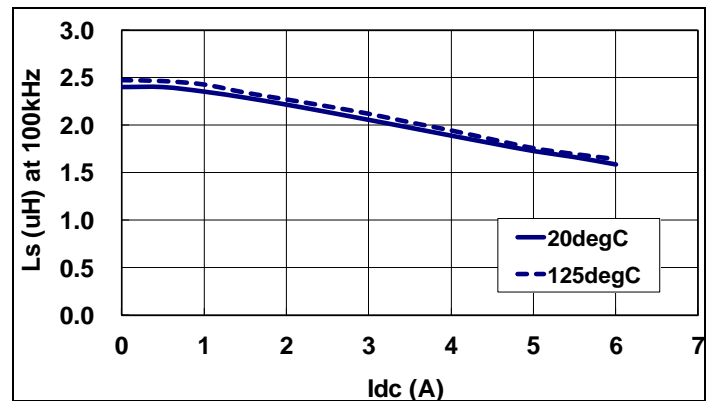
CDMT40D20HF-1R0NC



CDMT40D20HF-1R5NC

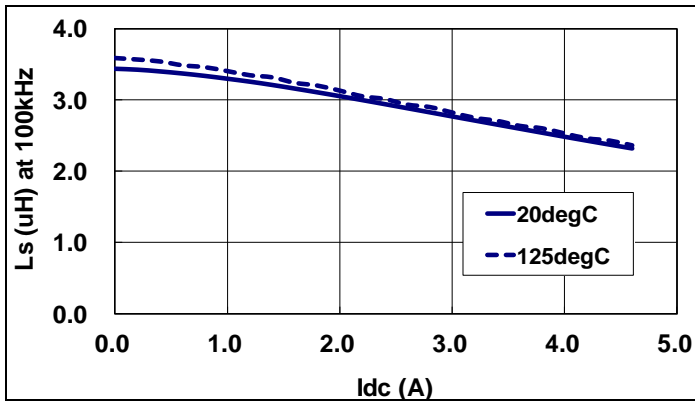


CDMT40D20HF-2R2NC

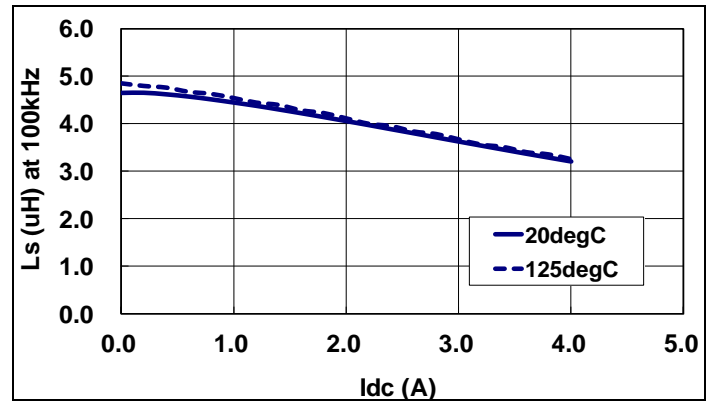


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CDMT40D20HF-3R3NC



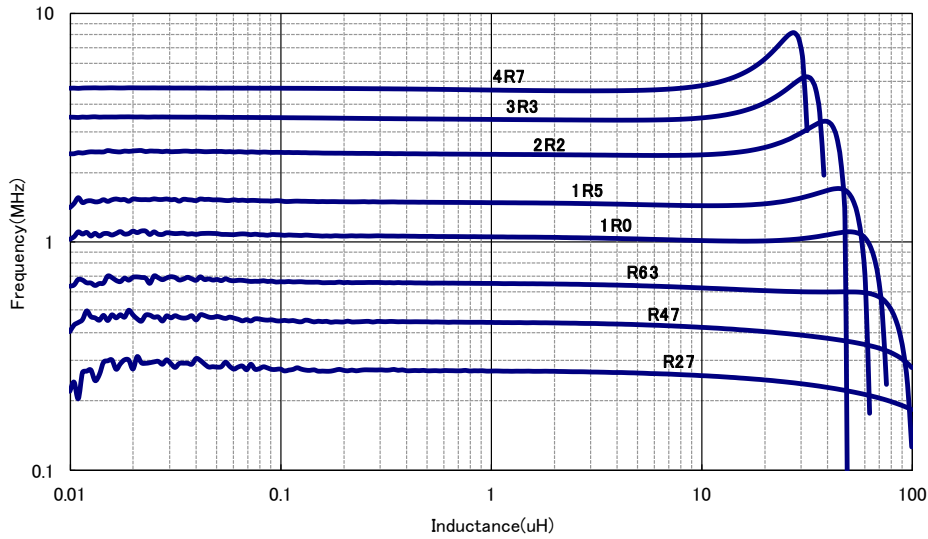
CDMT40D20HF-4R7NC



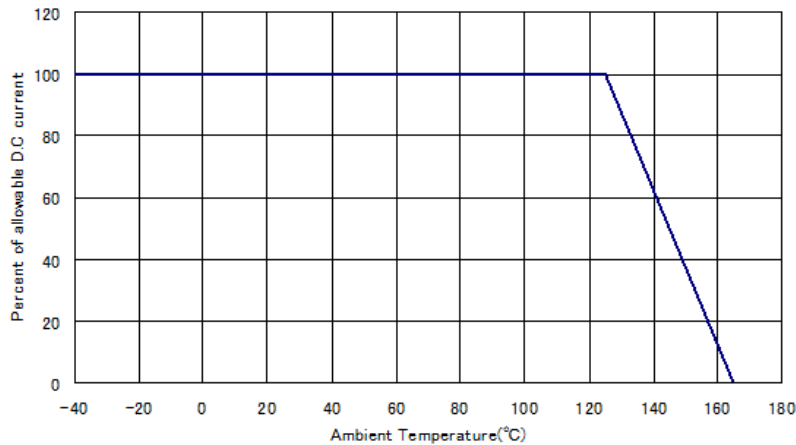
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## Inductance vs Frequency Graph



## Derating Curve (Temperature Rise Current)



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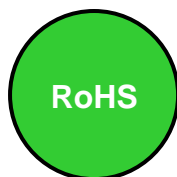
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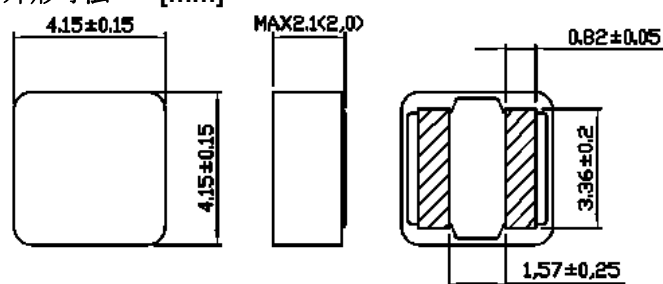
### 特性

- ・ 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)

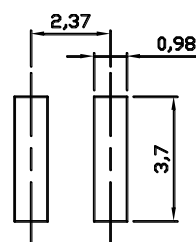
### 用途

- ・ 基地局、サーバー、SSD、低背大電流仕様

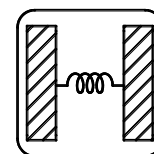
### 外形寸法 - [mm]



### 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
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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  $\Delta T=40^{\circ}\text{C}$ となる実力値とする。(Ta=20°C)

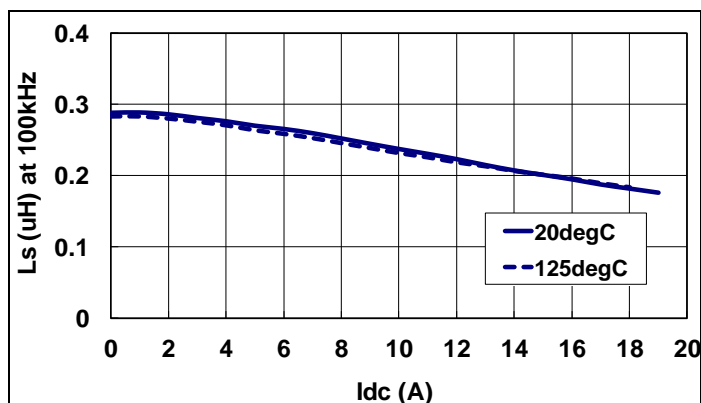
\*4 測定条件; Irms 試験値は 25°Cの環境での製品実力値。

\*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。

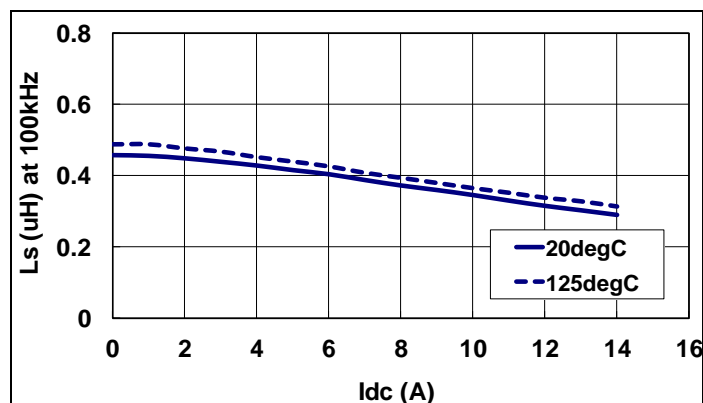
\*\* 静電気により耐電圧劣化発生の恐れがあります。コイルの取り扱いには静電気対策を実施下さい。

\*\*\* 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。

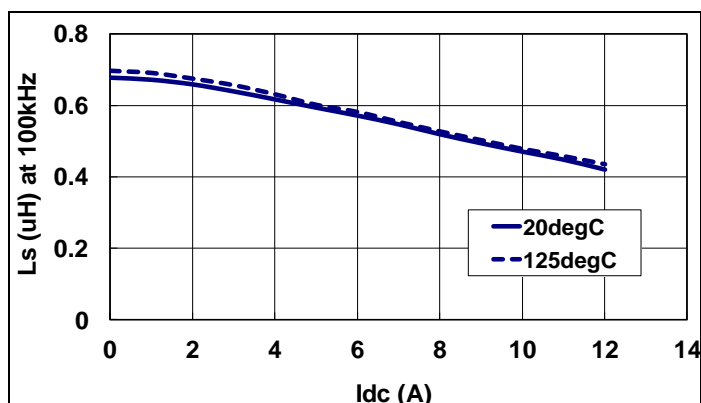
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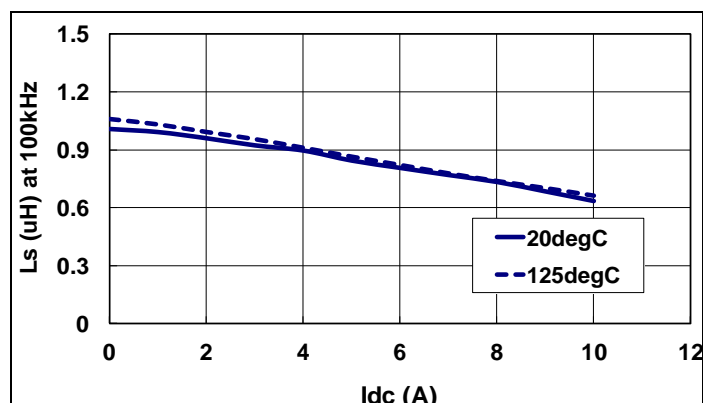
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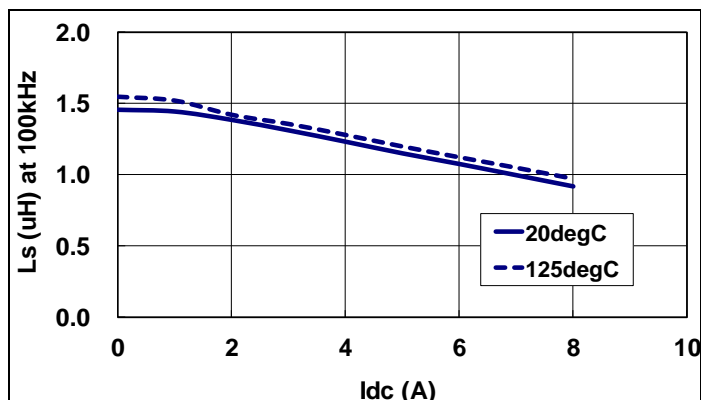
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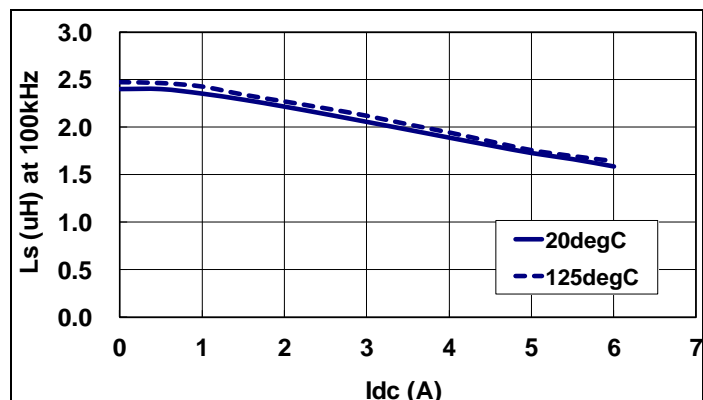
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CDMT40D20HF-1R5NC

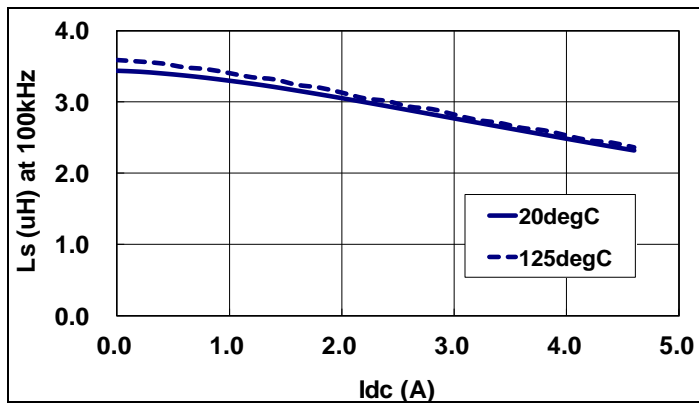


CDMT40D20HF-2R2NC

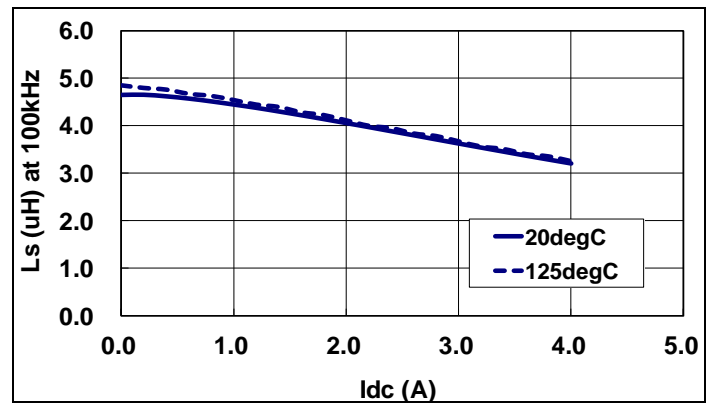


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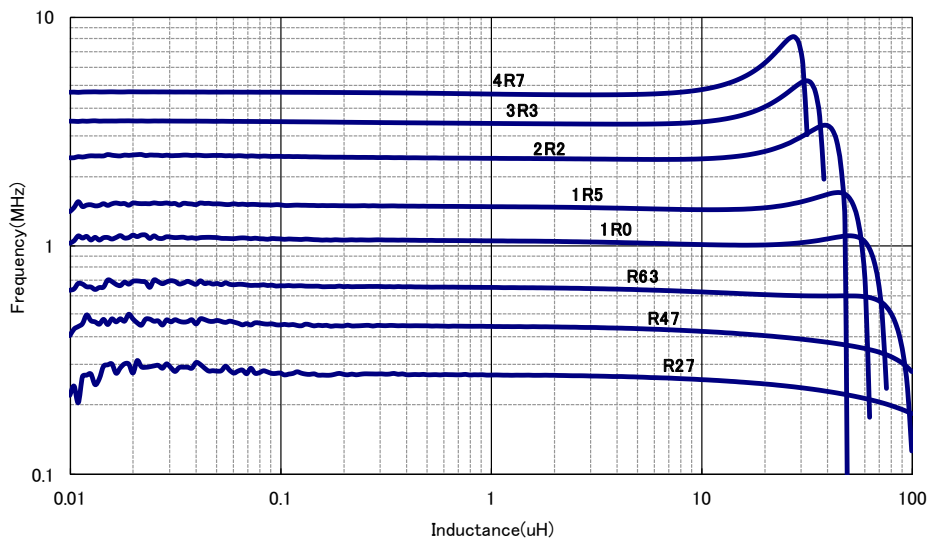
CDMT40D20HF-3R3NC



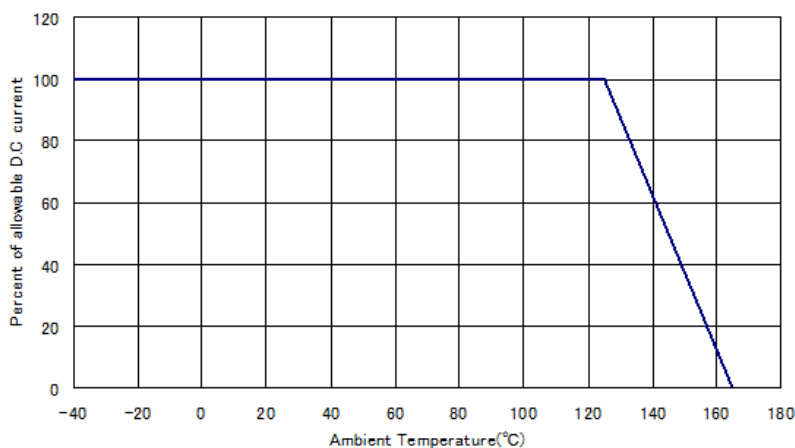
CDMT40D20HF-4R7NC



## Inductance vs Frequency Graph



## Derating Curve (Temperature Rise Current)



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