SMD Power Inductors (NR series)

NR8040T680M

■ Features

– Item Summary

68uH±20%, 1.1A, 8.0x8.0x4.0mm

– Lifecycle Stage

Mass Production

– Standard packaging quantity (minimum)

Taping Embossed 1000pcs

■ Products characteristics table

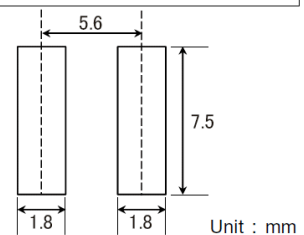|	
Inductance	68 uH ± 20 %
Case Size (mm)	8.0x8.0
Rated Current (max)	1.1 A
Saturation Current (max)	1.2 A
Temperature Rise Current (max)	1.1 A
DC Resistance (max)	0.299 Ω
DC Resistance (typ)	0.23 Ω
LQ Measuring Frequency	100 kHz
Self Resonant Frequency (min)	7 MHz
Operating Temp. Range	-25 to +120 ℃ (Including-self-generated heat)
Temperature characteristic (Inductance change)	± 20 %
RoHS2 Compliance (10 subst.)	Yes
REACH Compliance (173 subst.)	Yes
Halogen Free	Yes
Soldering	Reflow

■ External Dimensions

Dimension L	8.0 ±0.2 mm
Dimension W	8.0 ±0.2 mm
Dimension H	Max 4.0 mm
Dimension e	1.6 ±0.3 mm
Dimension f	5.6 ±0.3 mm

■ Recommended Land Patterns

【推奨ランドパターン】
実装上の注意
・実装状態を確認の上ご使用くださいますようお願いいたします。
・本製品のはんだ付けはリフローはんだ工法に限ります。

【Recommended Land Patterns】
Surface Mounting
・Mounting and soldering conditions should be checked beforehand.
・Applicable soldering process to these products is reflow soldering only.

5.6

7.5

1.8   1.8

Unit : mm

2017.05.03

The data is reference only. Electrical characteristics vary depending on environment or measurement condition.
TAIYO YUDEN reserves the right to make change to the Date at any time without notice.
Before making final selection, please check product specification.

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Dimension	unit : mm	unit : inch
Length :	8.0 + / - 0.2	(0.315 + / - 0.008)
Width :	8.0 + / - 0.2	(0.315 + / - 0.008)
Height :	4.0 max.	(0.157 max.)

Inductance : 68 uH   (test freq at 0.1MHz)
DC Resistance : 0.23 / 0.299   ohm (typ / max)
Saturation Current : 1,200 mA (max)
Temp. rise Current : 1,100 mA (max)

Saturation current typical : 30% reduction from initial L value.
Temp rise Current typical : Temperature will rise by 40 deg C
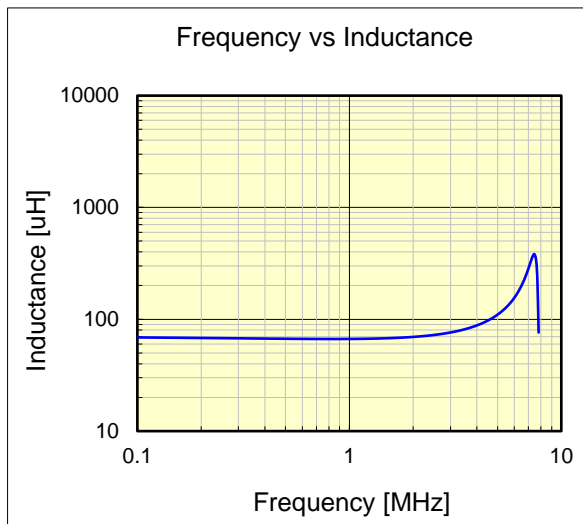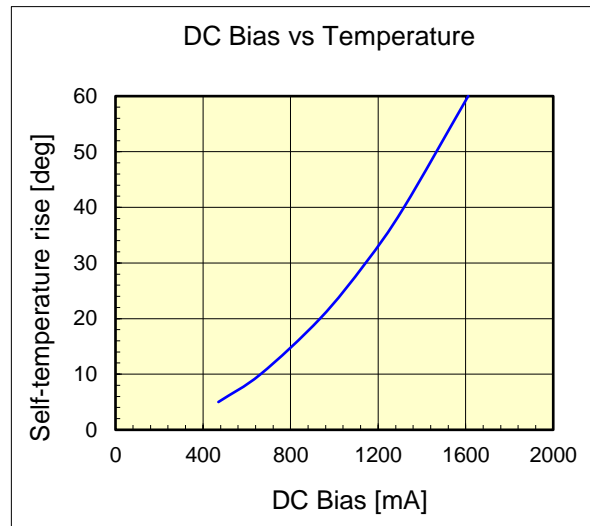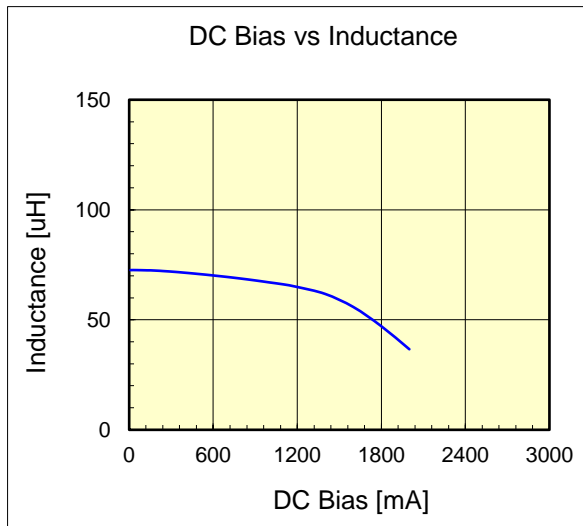
DC Bias vs Inductance

DC Bias vs Temperature

Frequency vs Inductance

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