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Please download the latest datasheet of LQH44PN470MGR# from the official website of Murata

http://www.murata.com/en-gb/products/productdetail?partno=LQH44PN470MGR%23

"#"at the end indicates the package specification code.

Size Code 4040 (1515) in mm (in inch), 1.0mm max. Thickness。 Low DC resistance design















< List of part numbers with package codes > LQH44PN470MGRK LQH44PN470MGRL



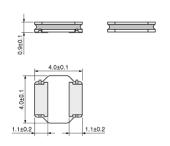
## **Applications**

Unsuitable	Please be sure to read and comply with	
Applications	these "Precautions for use."	
Specific Applications	Consumer equipment,Medical	
	equipment [GHTF A/B/C] except for	
	implant & surgery & auto injector,	
	Industrial equipment except for	
	transportation & facility & energy	
	equipment	
	Please refer to Our Website and	
	specifications, etc. for information about	
	the performance, functions, quality,	
	management, and safety required for	
	the above applications, and use	
	Products after confirming the	
	performance and reliability of the actual	
	Product.	
Recommended	Consumer equipment	
Applications		



## Appearance & Shape





(in mm)

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### **Notices**

When rated current is applied to the products, inductance will be within ±30% of initial inductance value range. Keep the temperature (ambient temperature plus self-generation of heat) under 125°C. When rated current is applied to the products, the self-temperature rise shall be limited to 40°C max (ambient temperature 85°C). When rated current is applied to the products, the self-temperature rise shall be limited to 20°C max (ambient temperature 85 °C to 105°C).



### References

	Specifications	Standard
Packaging		Packing
		Quantity
К	330Embossed Tape	4500
L	180Embossed Tape	1000

Mass (typ.)	
1 piece	0.059g

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# **Specifications**

L size 4.0±0.1mm  T size 0.9±0.1mm  T size 0.9±0.1mm  Size code inch (mm) 1515 (4040)  Inductance 47μH±20%  Inductance Test Frequency 1MHz  Rated current (Isat) (Based on Inductance change) 410mA(Ambient temp.85°C) 240mA(Ambient temp.105°C)  Max. of DC resistance 2.04Ω  DC resistance 1.7Ω±20%  Operating Temperature Range (Self-temperature rise is included)  Operating Temperature Range(Self-temperature rise is not included)  Class of magnetic shield Shielded (Magnetic Resin)  Self resonance frequency (min.)  Brand Murata  Series LQH44PN_GR		
T size 0.9±0.1mm  Size code inch (mm) 1515 (4040)  Inductance 47μH±20%  Inductance Test Frequency 1MHz  Rated current (Isat) (Based on Inductance change) 410mA(Ambient temp.85°C) 240mA(Ambient temp.105°C)  Max. of DC resistance 2.04Ω  DC resistance 1.7Ω±20%  Operating Temperature Range (Self-temperature rise is included)  Operating Temperature Range(Self-temperature rise is not included)  Class of magnetic shield Shielded (Magnetic Resin)  Self resonance frequency (min.)  Brand Murata	L size	4.0±0.1mm
Size code inch (mm)  Inductance  47μH±20%  Inductance Test Frequency  Rated current (Isat) (Based on Inductance change)  Rated current (Itemp)  (Based on Temperature rise)  Max. of DC resistance  DC resistance  1.7Ω±20%  Operating Temperature Range (Self-temperature Range (Self-temperature rise is included)  Operating Temperature  Range(Self-temperature rise is not included)  Class of magnetic shield  Self resonance frequency (min.)  Brand  Murata	W size	4.0±0.1mm
Inductance	T size	0.9±0.1mm
Inductance Test Frequency  Rated current (Isat) (Based on Inductance change)  Rated current (Itemp) (Based on Temperature rise)  Max. of DC resistance  DC resistance  1.7Ω±20%  Operating Temperature Range (Self-temperature rise is included)  Operating Temperature Range(Self-temperature rise is not included)  Class of magnetic shield  Shielded (Magnetic Resin)  Self resonance frequency (min.)  Brand  Murata	Size code inch (mm)	1515 (4040)
Rated current (Isat) (Based on Inductance change)  Rated current (Itemp) (Based on Temperature rise)  Max. of DC resistance  DC resistance  1.7Ω±20%  Operating Temperature Range (Self-temperature rise is included)  Operating Temperature Range(Self-temperature Range(Self-temperature Range(Self-temperature rise is not included)  Class of magnetic shield  Shielded (Magnetic Resin)  Self resonance frequency (min.)  Brand  Murata	Inductance	47μH±20%
on Inductance change)  Rated current (Itemp) (Based on Temperature rise)  Max. of DC resistance  2.04Ω  DC resistance  1.7Ω±20%  Operating Temperature Range (Self-temperature rise is not included)  Class of magnetic shield  Shielded (Magnetic Resin)  Self resonance frequency (min.)  Brand  Murata	Inductance Test Frequency	1MHz
(Based on Temperature rise)       240mA(Ambient temp.105°C)         Max. of DC resistance       2.04Ω         DC resistance       1.7Ω±20%         Operating Temperature       -40°C to 125°C         rise is included)       -40°C to 125°C         Operating Temperature       -40°C to 105°C         Range(Self-temperature rise is not included)       -40°C to 105°C         Class of magnetic shield       Shielded (Magnetic Resin)         Self resonance frequency (min.)       6MHz         Brand       Murata	` ' '	360mA
Max. of DC resistance       2.04Ω         DC resistance       1.7Ω±20%         Operating Temperature       -40°C to 125°C         rise is included)       -40°C to 125°C         Operating Temperature       -40°C to 105°C         Range(Self-temperature rise is not included)       -40°C to 105°C         Class of magnetic shield       Shielded (Magnetic Resin)         Self resonance frequency (min.)       6MHz         Brand       Murata	` ' '	' '
DC resistance  1.7Ω±20%  Operating Temperature Range (Self-temperature rise is included)  Operating Temperature Range(Self-temperature Range(Self-temperature rise is not included)  Class of magnetic shield  Shielded (Magnetic Resin)  Self resonance frequency (min.)  Brand  Murata	(Based on Temperature rise)	240mA(Ambient temp.105°C)
Operating Temperature Range (Self-temperature rise is included)  Operating Temperature Range(Self-temperature Range(Self-temperature rise is not included)  Class of magnetic shield  Shielded (Magnetic Resin)  Self resonance frequency (min.)  Brand  Murata	Max. of DC resistance	2.04Ω
Range (Self-temperature rise is included)  Operating Temperature Range(Self-temperature rise is not included)  Class of magnetic shield  Shielded (Magnetic Resin)  Self resonance frequency (min.)  Brand  Murata	DC resistance	1.7Ω±20%
Range(Self-temperature rise is not included)  Class of magnetic shield  Shielded (Magnetic Resin)  Self resonance frequency (min.)  Brand  Murata	Range (Self-temperature	-40°C to 125°C
Self resonance frequency (min.)  Brand  Murata	Range(Self-temperature rise	-40°C to 105°C
(min.)  Brand  Murata	Class of magnetic shield	Shielded (Magnetic Resin)
		6MHz
Series LQH44PN_GR	Brand	Murata
	Series	LQH44PN_GR

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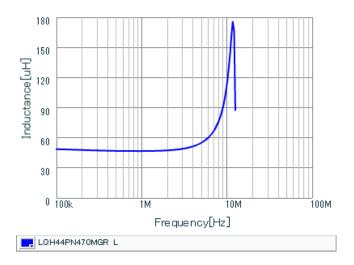
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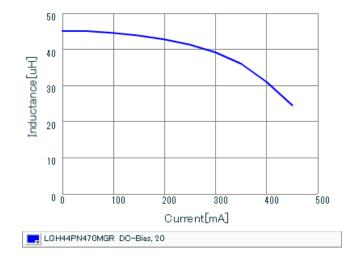
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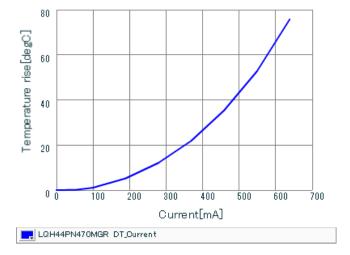


## Characteristic Data





### Inductance - Frequency Characteristics



Impedance - Current Characteristics

Temperature Increase Characteristic

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