

# LQH3NPZ220MMEL

“#” at the end indicates the package specification code.

Size Code 3030 (1212) in mm (in inch), 1.5mm max. Thickness. high performance type.

In Production

AEC-Q200

RoHS

REACH

125 °C max.

Wound (Ferrite)

Low Rdc

Bias

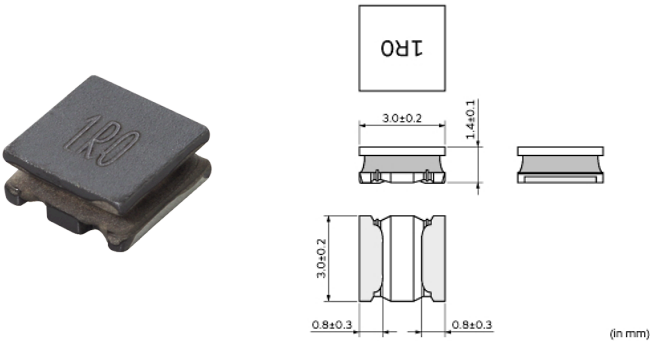
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< List of part numbers with package codes >  
LQH3NPZ220MMEL

## Applications

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Unsuitable Applications  | Please be sure to read and comply with these "Precautions for use."                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Specific Applications    | Consumer equipment, Automotive infotainment/comfort equipment, Medical equipment [GHTE A/B/C] except for implant & surgery & auto injector, Industrial equipment except for transportation & facility & energy equipment<br>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 Applications | Automotive infotainment/comfort equipment                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## Appearance & Shape



**Attention**  
1. This datasheet is downloaded from the website of Murata Manufacturing Co., Ltd. Therefore, its specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.  
2. This datasheet has only typical specifications because there is no space for detailed specifications.  
Therefore, please review our product specifications or consult the approval sheet for product specifications before ordering.

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## Notices

When rated current is applied to the products, inductance will be within  $\pm 30\%$  of initial inductance value range. Keep the temperature (ambient temperature plus self-generation of heat) under  $125^{\circ}\text{C}$ . When rated current is applied to the products, temperature rise caused by self-generated heat shall be limited to  $40^{\circ}\text{C}$  max (ambient temperature  $85^{\circ}\text{C}$  max). When rated current is applied to the products, temperature rise caused by self-generated heat shall be limited to  $20^{\circ}\text{C}$  max (ambient temperature  $85^{\circ}\text{C}$  to  $105^{\circ}\text{C}$ ).

## References

| Packaging | Specifications   | Standard Packing Quantity |
|-----------|------------------|---------------------------|
| L         | 180Embossed Tape | 2000                      |

| Mass (typ.) |        |
|-------------|--------|
| 1 piece     | 0.051g |

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## Specifications

|                                                                    |                                                                           |
|--------------------------------------------------------------------|---------------------------------------------------------------------------|
| L size                                                             | 3.0±0.2mm                                                                 |
| W size                                                             | 3.0±0.2mm                                                                 |
| T size                                                             | 1.4±0.1mm                                                                 |
| Size code inch (mm)                                                | 1212 (3030)                                                               |
| Inductance                                                         | 22μH±20%                                                                  |
| Inductance Test Frequency                                          | 1MHz                                                                      |
| Rated current (Isat) (Based on Inductance change)                  | 570mA(Max.) / 680mA(Typ.)                                                 |
| Rated current (Itemp) (Based on Temperature rise)                  | Ambient temp.85°C 860mA (Max.) 1000mA(Typ.)Ambient temp.105°C 540mA(Max.) |
| Max. of DC resistance                                              | 0.48Ω                                                                     |
| DC resistance                                                      | 0.40Ω±20%                                                                 |
| Operating Temperature Range (Self-temperature rise is included)    | -40°C to 125°C                                                            |
| Operating Temperature Range(Self-temperature rise is not included) | -40°C to 105°C                                                            |
| Class of magnetic shield                                           | Shielded (Magnetic Resin)                                                 |
| Self resonance frequency (min.)                                    | 10MHz                                                                     |
| Brand                                                              | Murata                                                                    |
| Series                                                             | LQH3NPZ_ME                                                                |

### Attention

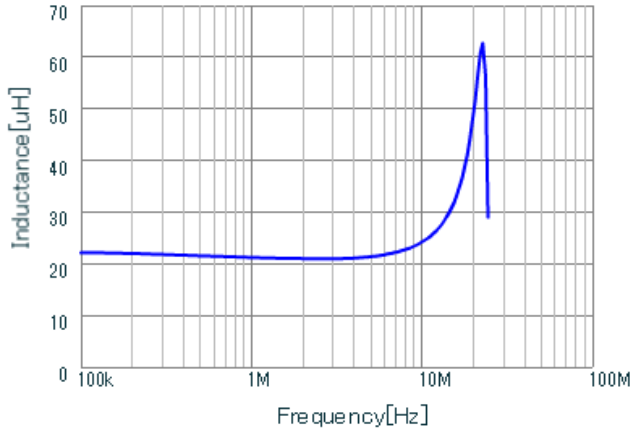
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# LQH3NPZ220MME#

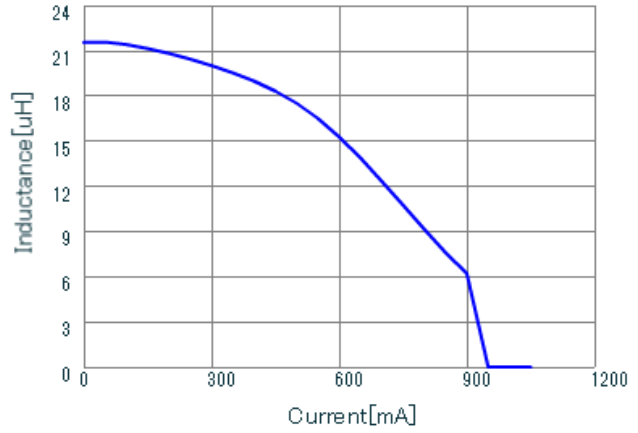
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## Characteristic Data



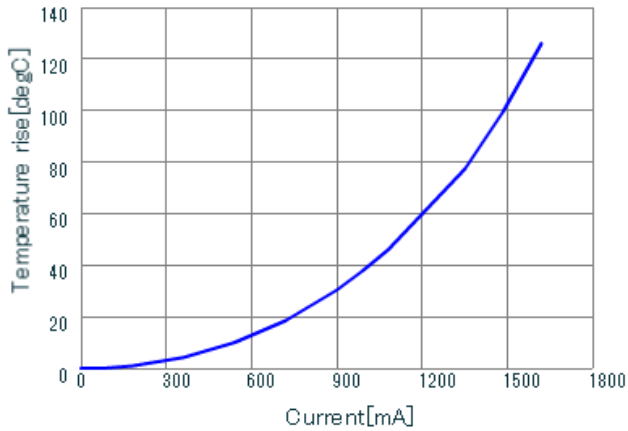
LQH3NPZ220MME L



LQH3NPZ220MME DC-Bias, 20

### Inductance - Frequency Characteristics

### Impedance - Current Characteristics



LQH3NPZ220MME DT\_Current

### Temperature Increase Characteristic

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