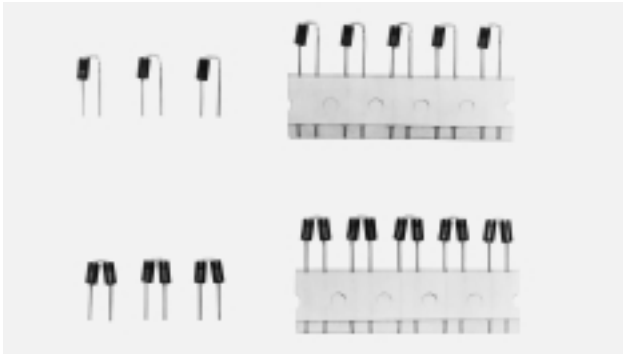


## BL01, BL02 & BL03 Series



Ferrite beads are used for noise suppression in car radios, digital control equipment and for the prevention of spurious oscillation in radio frequency amplifiers. These ferrite bead inductors are devices which can effectively be used on printed circuit boards where high component density is essential. Taped and reeled types are also available for automatic insertion. Radial leaded units can be classified into two types — one using a single ferrite bead and the other using two ferrite beads.

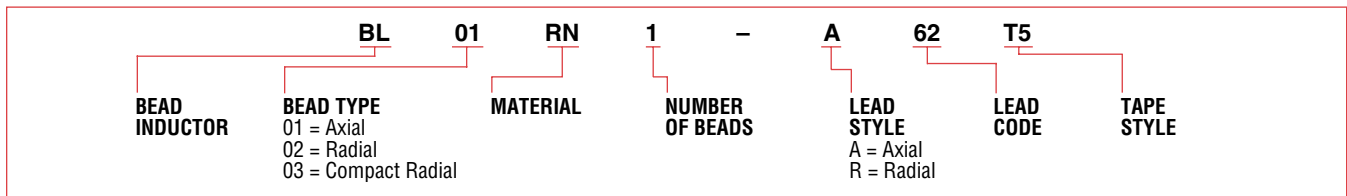
### APPLICATIONS

Micro computer, switching regulators, digital control equipment, car radios, car stereos, etc.

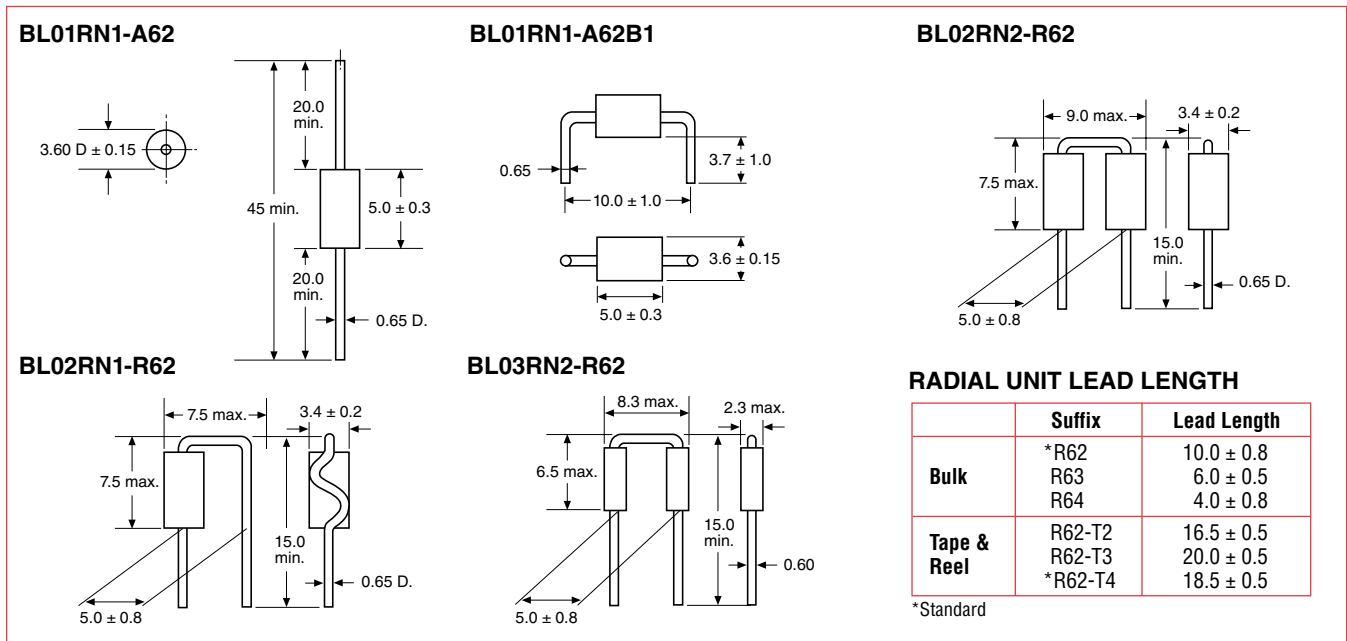
### FEATURES

- High component density potential
- Double bead BL02RN2 types offered for more effective noise suppression
- Taped and reeled radial and axial types for automatic insertion can be provided as well as ammo packaging.
- Axial lead version BL01RN1-A62 available

### PART NUMBERING SYSTEM



### DIMENSIONS: mm



### SPECIFICATIONS

| Item                                  | Characteristics                      |
|---------------------------------------|--------------------------------------|
| <b>Permeability</b>                   | ( $\mu$ i) 550                       |
| <b>Saturation Magnetic</b>            | (Bs) 3100 (gauss)                    |
| <b>Residual Magnetic Flux Density</b> | (Brs) 1700 (gauss)                   |
| <b>Coercive Force</b>                 | (Hc) 0.3 (Oe)                        |
| <b>Curie Point</b>                    | (Tc) 130 (°C)                        |
| <b>Temp. Coefficient</b>              | ( $\alpha\mu$ r) $20 \times 10^{-6}$ |
| <b>Relative Loss Factor</b>           | (DF/ $\mu$ i) $13 \times 10^{-6}$    |
| <b>Resistivity</b>                    | ( $\rho$ ) $10^7$ (Ohms-cm)          |
| <b>Max. Rated Current</b>             | BL01 and BL02 (A) (Bulk) 7A          |
|                                       | BL01 and BL02 (A) (Taped) 6A         |
|                                       | BL03 (Taped or Bulk) 6A              |

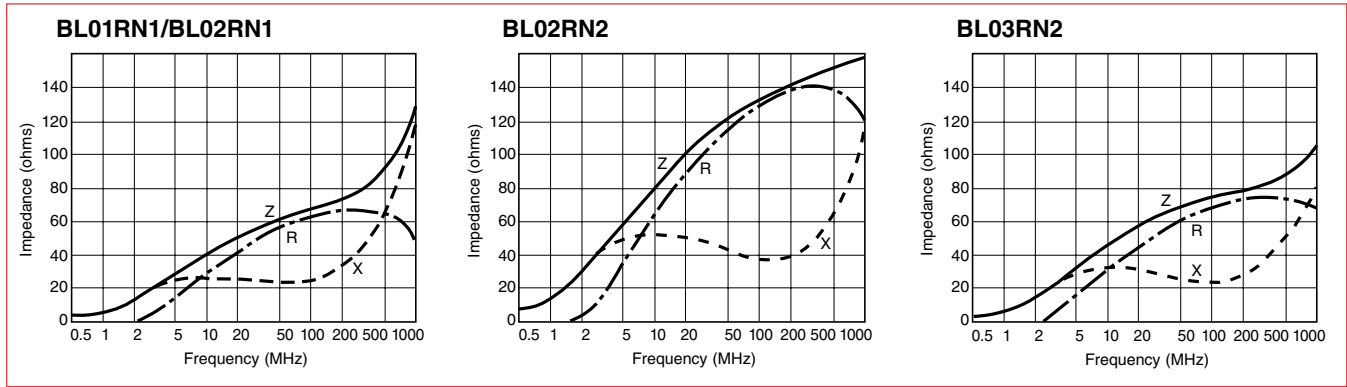
### CONFIGURATIONS

| Part Number    | Form                        |
|----------------|-----------------------------|
| *BL01RN1-A62   | Axial, Single bead          |
| *BL01RN1-A62B1 | Axial, Single bead, Bent    |
| *BL01RN1-A62T5 | Axial, Single bead, Taped   |
| *BL01RN1-A63T6 | Axial, Single bead, Taped   |
| *BL02RN1-R62   | Radial, Single bead         |
| *BL02RN2-R62   | Radial, Double bead         |
| *BL02RN1-R62T4 | Radial, Single bead, (Ammo) |
| *BL02RN2-R62T4 | Radial, Double bead, (Ammo) |
| *BL03RN2-R62   | Radial, Double bead         |
| *BL03RN2-R62T4 | Radial, Double bead, Ammo   |

Operating Temperature: -25°C to +85°C

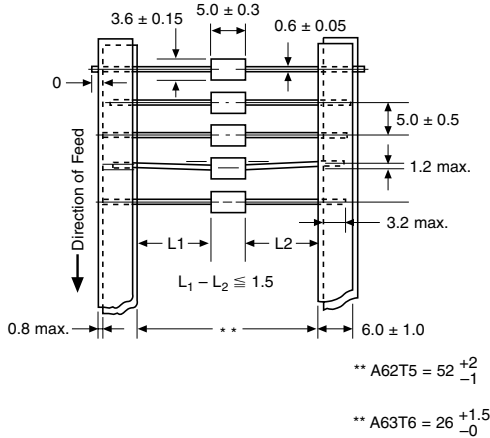
\*Available as standard through authorized Murata Electronics Distributors.

TYPICAL IMPEDANCE CHARACTERISTICS

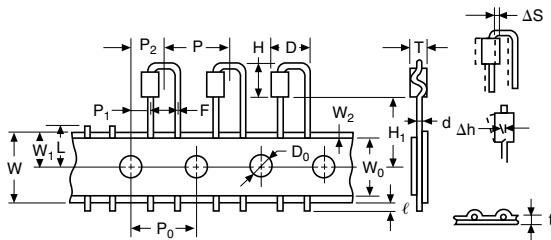


TAPE DIMENSIONS: mm

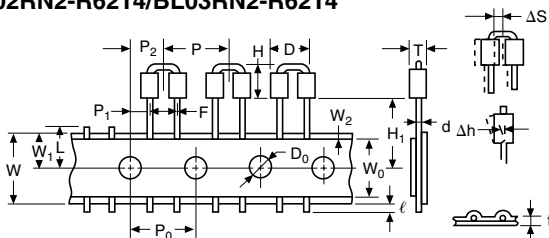
AXIAL LEAD TYPE BL01 SERIES  
BL01RN1-A62T5/A63T6



RADIAL LEAD TYPE BL02/BL03 SERIES  
BL02RN1-R62T4



BL02RN2-R62T4/BL03RN2-R62T4



| Item                                        | Code           | Dimensions: mm                                           |
|---------------------------------------------|----------------|----------------------------------------------------------|
| Pitch of Component                          | P              | 12.7                                                     |
| Pitch of Sprocket Hole                      | P <sub>0</sub> | 12.7 ± 0.2                                               |
| Lead Spacing                                | F              | 5.0 <sup>+0.8</sup> <sub>-0.2</sub>                      |
| Length from Hole Center to Lead             | P <sub>1</sub> | 3.85 ± 0.7                                               |
| Length from Hole Center to Component Center | P <sub>2</sub> | 6.35 ± 1.3                                               |
| Width of Body                               | D              | BL02RN1 7.5 max.<br>BL02RN2 9.0 max.<br>BL03RN2 8.3 max. |
| Height of Bead                              | H              | BL02 7.5 max.<br>BL03 6.5 max.                           |
| Deviation along Tape, Left or Right         | ΔS             | ±1.0                                                     |
| Carrier Tape Width                          | W              | 18.0 ± 0.5                                               |
| Position of Sprocket Hole                   | W <sub>1</sub> | 9.0 <sup>+0</sup> <sub>-0.5</sub>                        |
| Lead Length                                 | H <sub>1</sub> | T2= 16.5 ± 0.5<br>T3= 20.0 ± 0.5<br>T4= 18.5 ± 0.5       |
| Protrusion Length                           | ℓ              | +0.5 to -1.0                                             |
| Diameter of Sprocket Hole                   | D <sub>0</sub> | 4.0 ± 0.1                                                |
| Lead Diameter                               | d              | 0.60 ± 0.5                                               |
| Total Tape Thickness                        | t              | 0.7 ± 0.2                                                |
| Deviation Across Tape                       | Δh             | ±1.0 max.                                                |
| Portion to Cut in Case of Defect            | L              | 11.0 <sup>+0</sup> <sub>-1.0</sub>                       |
| Hold Down Tape Width                        | W <sub>0</sub> | 12.0 ± 0.5                                               |
| Hold Down Tape Position                     | W <sub>2</sub> | 1.5 ± 1.5                                                |
| Body Thickness                              | T              | BL02 3.4 ± 0.2<br>BL03 2.3 max.                          |