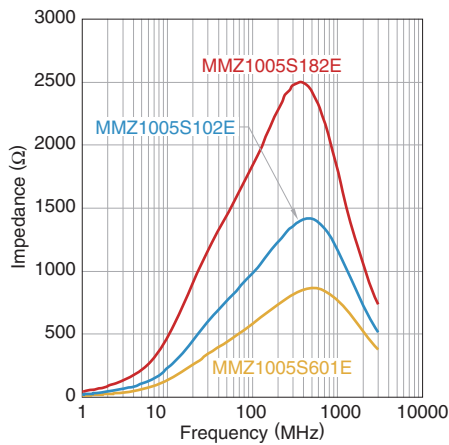


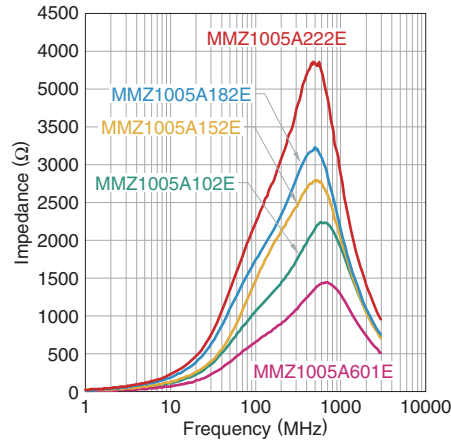
# MMZ1005-E type

## Z VS. FREQUENCY CHARACTERISTICS (BY SERIES)

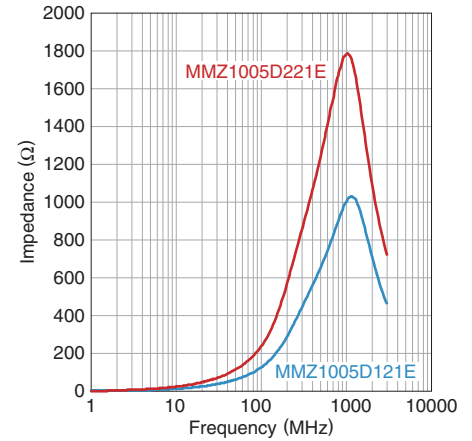
**MMZ1005S-E series**



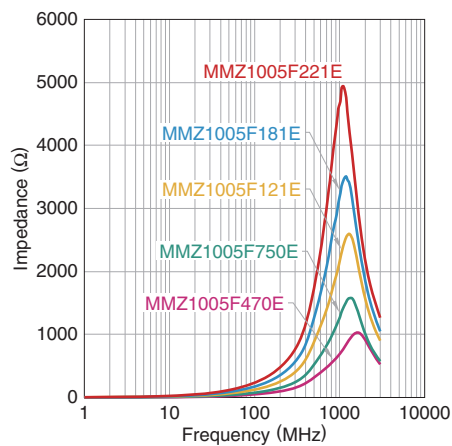
**MMZ1005A-E series**



**MMZ1005D-E series**



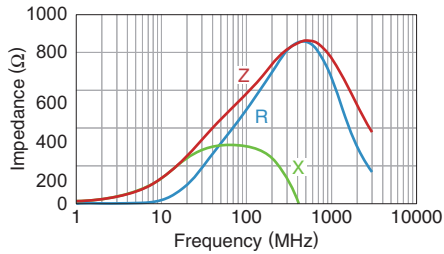
**MMZ1005F-E series**



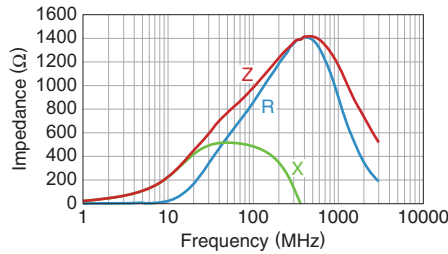
# MMZ1005-E type

## Z, X, R VS. FREQUENCY CHARACTERISTICS

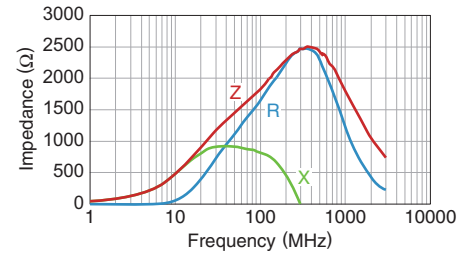
MMZ1005S601ET000



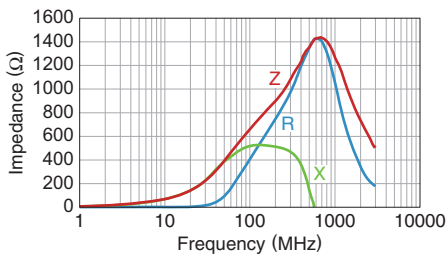
MMZ1005S102ET000



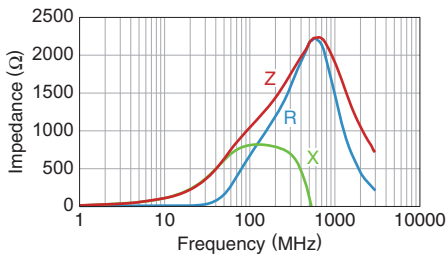
MMZ1005S182ET000



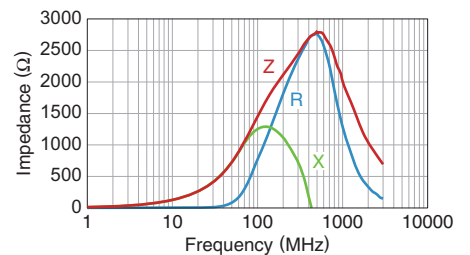
MMZ1005A601ET000



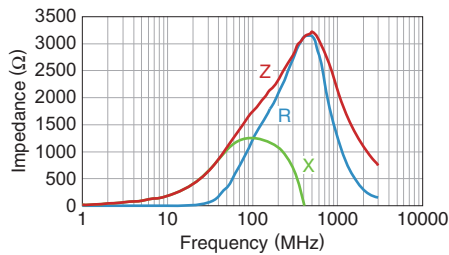
MMZ1005A102ET000



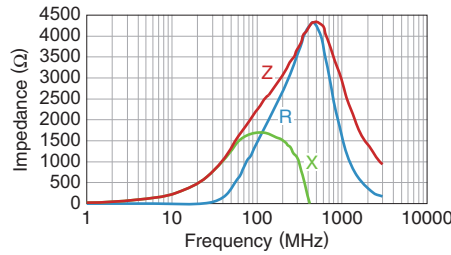
MMZ1005A152ET000



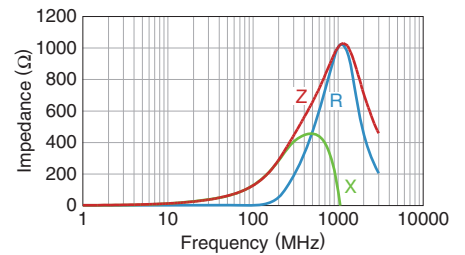
MMZ1005A182ET000



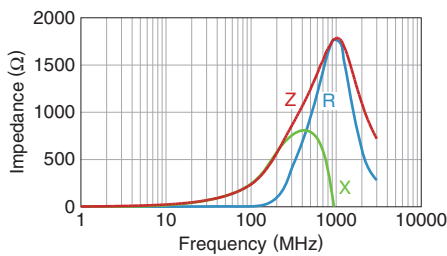
MMZ1005A222ET000



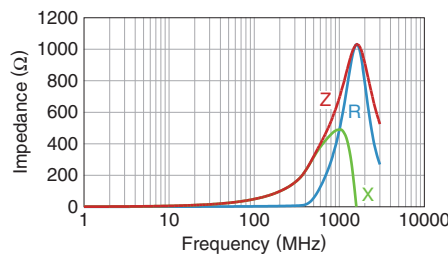
MMZ1005D121ET000



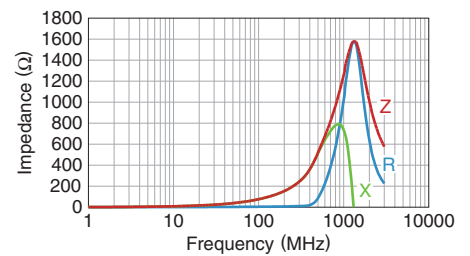
MMZ1005D221ET000



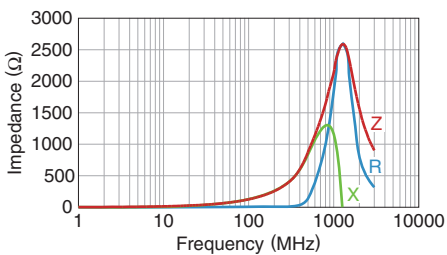
MMZ1005F470ET000



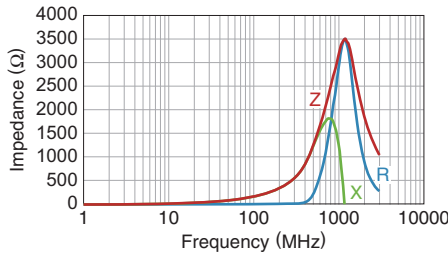
MMZ1005F750ET000



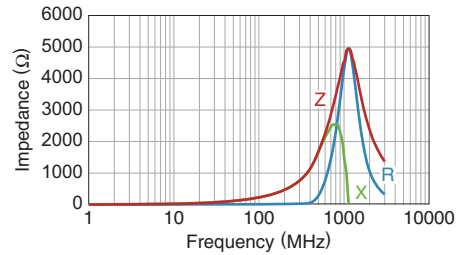
MMZ1005F121ET000



MMZ1005F181ET000



MMZ1005F221ET000



## ■ SHAPE & DIMENSIONS



Dimensions in mm

The graph illustrates the temperature profile of a soldering process. The Y-axis represents Temperature, and the X-axis represents Time. The profile is divided into three main phases: Preheating, Soldering, and Natural cooling. The Preheating phase starts at 150°C and rises to 180°C over 60 to 120 seconds. The Soldering phase starts at 180°C, rises to a Peak of 250 to 260°C, and then falls back to 230°C over 30 to 60 seconds. The Natural cooling phase starts at 230°C and falls to 150°C over 10 seconds. The Soldering phase is further divided into a Preheating sub-phase (180°C to 230°C) and a Soldering sub-phase (230°C to Peak).

## REEL DIMENSIONS



Dimensions in mm

Dimensions in mm

Operating temperature range	Storage temperature range*	Individual weight
-55 to +125°C	-55 to +125°C	1 mg

\* The storage temperature range is for after the assembly.

# REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

## SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using this products.

### REMINDERS

- The storage period is within 12 months. Be sure to follow the storage conditions (temperature: 5 to 40°C, humidity: 10 to 75% RH or less).  
If the storage period elapses, the soldering of the terminal electrodes may deteriorate.
- Do not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).
- Before soldering, be sure to preheat components.  
The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications.  
If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- When embedding a printed circuit board where a chip is mounted to a set, be sure that residual stress is not given to the chip due to the overall distortion of the printed circuit board and partial distortion such as at screw tightening portions.
- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Carefully lay out the coil for the circuit board design of the non-magnetic shield type.  
A malfunction may occur due to magnetic interference.
- Use a wrist band to discharge static electricity in your body through the grounding wire.
- Do not expose the products to magnets or magnetic fields.
- Do not use for a purpose outside of the contents regulated in the delivery specifications.
- The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.  
The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.  
If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please contact us.

- (1) Aerospace/aviation equipment
- (2) Transportation equipment (cars, electric trains, ships, etc.)
- (3) Medical equipment
- (4) Power-generation control equipment
- (5) Atomic energy-related equipment
- (6) Seabed equipment
- (7) Transportation control equipment

- (8) Public information-processing equipment
- (9) Military equipment
- (10) Electric heating apparatus, burning equipment
- (11) Disaster prevention/crime prevention equipment
- (12) Safety equipment
- (13) Other applications that are not considered general-purpose applications

When designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.