

Chip Beads(SMD) For Power Line

Conformity to RoHS Directive

MPZ Series MPZ1608 Type

FEATURES

- This type is the best for energy-saving in the low DC resistance.
- The products contain no lead and also support lead-free soldering.
- It is a product conforming to RoHS directive.

APPLICATIONS

Removal of power line noises of cellular phones, PCs, note PCs, TVs, TV tuners, STBs, audio players, DVDs, DSCs, DVCs, game machines, digital photo frames, car navigation system, PNDs, etc.

PRODUCT IDENTIFICATION

| | | | | | |
|-----|------|-----|-----|-----|-----|
| MPZ | 1608 | S | 221 | A | T |
| (1) | (2) | (3) | (4) | (5) | (6) |

- (1) Series name
 (2) Dimensions L×W
 (3) Material code
 (4) Nominal impedance
 221: 220Ω at 100MHz
 (5) Characteristic type
 (6) Packaging style
 T: Taping

HANDLING AND PRECAUTIONS

- Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and product temperature does not exceed 150°C.
- After mounting components onto the printed circuit board, do not apply stress through board bending or mishandling.
- Do not expose the inductors to stray magnetic fields.
- Avoid static electricity discharge during handling.
- When hand soldering, apply the soldering iron to the printed circuit board only. Temperature of the iron tip should not exceed 350°C. Soldering time should not exceed 3 seconds.

MATERIAL CHARACTERISTICS

B material: This type is perfectly suited for fast digital signals. By equalizing R components and X components that beads possess at a frequency of 5MHz, it is able to suppress overshooting, undershooting and ringing of fast digital signals.

R material: For wide frequency applications calling for broad impedance characteristics.

For digital signal line applications calling requiring good waveform integrity. Impedance values selected for effectiveness at 10 to 200MHz.

S material: Standard type that features impedance characteristics similar to those of a typical ferrite core.

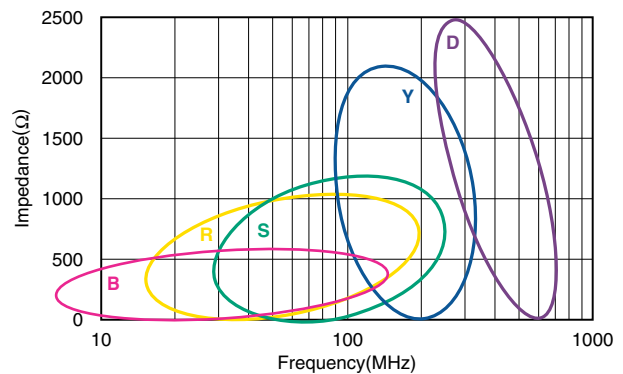
For signal line applications in which the blocking region is near 100MHz. Impedance values selected for effectiveness at 40 to 300MHz.

Y material: High frequency range type intended for the 100MHz region and above.

For signal line applications in which the signal frequency is far from the cutoff frequency. Impedance values selected for effectiveness at 80 to 400MHz.

D material: For applications calling for low insertion loss at low frequencies and sharply increasing impedance at high frequencies. Designed for high impedance at high frequencies (300MHz to 1GHz) for signal line applications.

TYPICAL MATERIAL CHARACTERISTICS

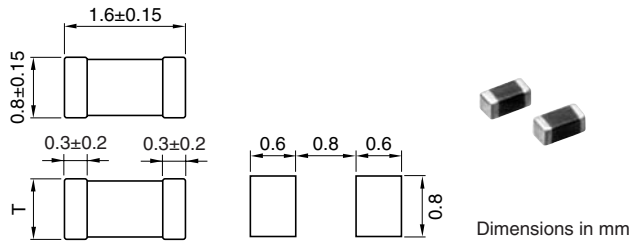


• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• Please contact our Sales office when your application are considered the following:
 The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

• All specifications are subject to change without notice.

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



| Thickness(T) | Weight |
|--------------|--------|
| 0.6±0.15mm | 3mg |
| 0.8±0.15mm | 4mg |

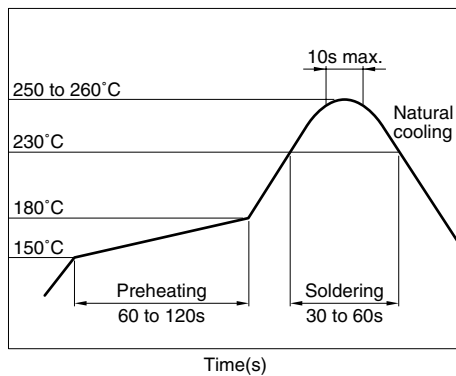
TEMPERATURE RANGES

Operating/storage -55 to +125°C

PACKAGING STYLE AND QUANTITIES

| Packaging style | Quantity |
|-----------------|------------------|
| Taping | 4000 pieces/reel |

RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



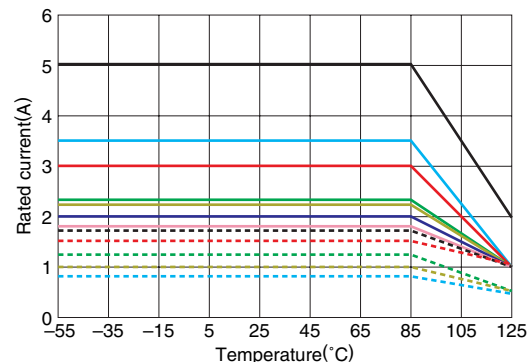
ELECTRICAL CHARACTERISTICS

| Part No. | Impedance (Ω)[100MHz]*1 | DC resistance (Ω)max. | Rated current*2 (A)max. | Thickness T(mm) |
|--------------|-------------------------------------|-----------------------------------|----------------------------|--------------------|
| MPZ1608B471A | 470±25% | 0.150 | 1.0 | 0.8 |
| MPZ1608S300A | 30±10 Ω | 0.010 | 5.0 | 0.6 |
| MPZ1608S600A | 60±25% | 0.020 | 3.5 | 0.6 |
| MPZ1608S101A | 100±25% | 0.030 | 3.0 | 0.6 |
| MPZ1608S121A | 120±25% | 0.045 | 2.0 | 0.6 |
| MPZ1608S181A | 180±25% | 0.050 | 2.0 | 0.6 |
| MPZ1608S221A | 220±25% | 0.050 | 2.2 | 0.8 |
| MPZ1608S331A | 330±25% | 0.080 | 1.7 | 0.8 |
| MPZ1608R391A | 390±25% | 0.120 | 1.2 | 0.8 |
| MPZ1608S471A | 470±25% | 0.150 | 1.0 | 0.8 |
| MPZ1608S601A | 600±25% | 0.150 | 1.0 | 0.8 |
| MPZ1608S102A | 1000±25% | 0.300 | 0.8 | 0.8 |
| MPZ1608Y600B | 60±25% | 0.030 | 2.3 | 0.8 |
| MPZ1608Y101B | 100±25% | 0.040 | 2.0 | 0.8 |
| MPZ1608Y151B | 150±25% | 0.050 | 1.8 | 0.8 |
| MPZ1608Y221B | 220±25% | 0.100 | 1.5 | 0.8 |
| MPZ1608D300B | 30±10 Ω | 0.060 | 1.8 | 0.8 |
| MPZ1608D600B | 60±25% | 0.100 | 1.2 | 0.8 |
| MPZ1608D101B | 100±25% | 0.150 | 1.0 | 0.8 |

*1 Test equipment: E4991A or equivalent
Test tool: 16192A or equivalent
Test temperature: 25±10°C

*2 Please refer to the graph of RATED CURRENT vs. TEMPERATURE CHARACTERISTICS(DERATING) about the rating current at 85°C or more in temperature of the product.

RATED CURRENT vs. TEMPERATURE CHARACTERISTICS (DERATING)

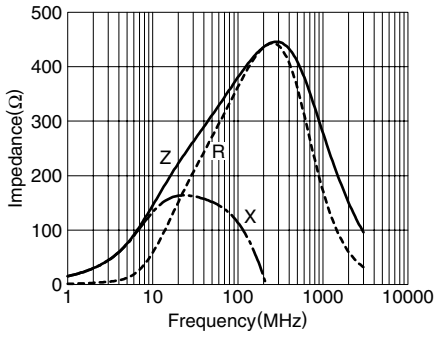


| | | | |
|-----------------------------|---------------------|-----------------|---------|
| — S300A | — S600A | — S101A | — Y600B |
| — S221A | — S121A,S181A,Y101B | — Y151B,D300B | |
| --- S331A | --- Y221B | --- R391A,D600B | |
| --- B471A,S471A,S601A,D101B | --- S102A | | |

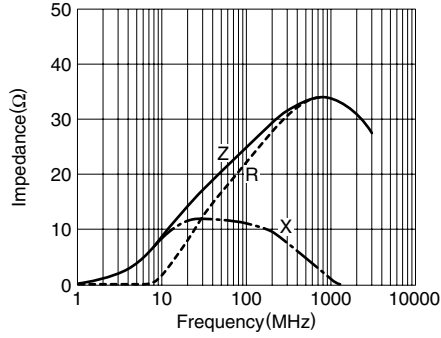
TYPICAL ELECTRICAL CHARACTERISTICS

Z, X, R vs. FREQUENCY CHARACTERISTICS

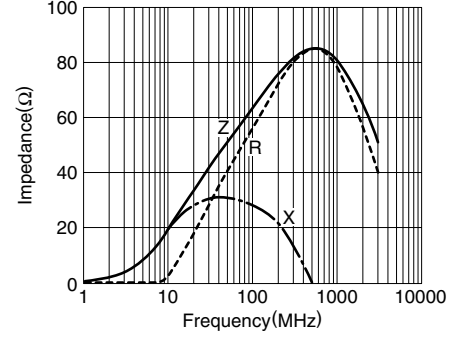
MPZ1608B121C



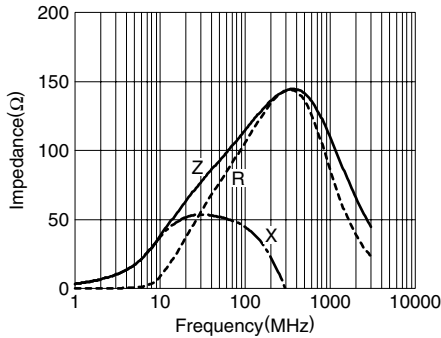
MPZ1608S300A



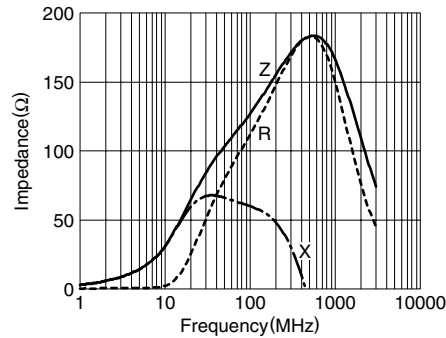
MPZ1608S600A



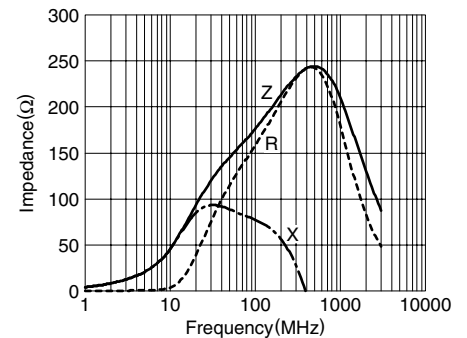
MPZ1608S101A



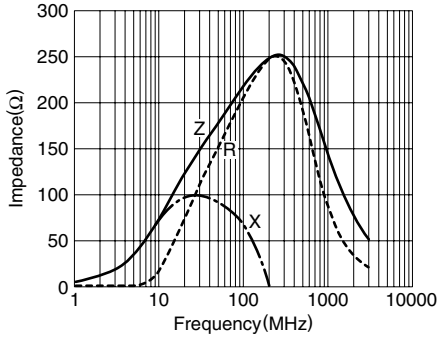
MPZ1608S121A



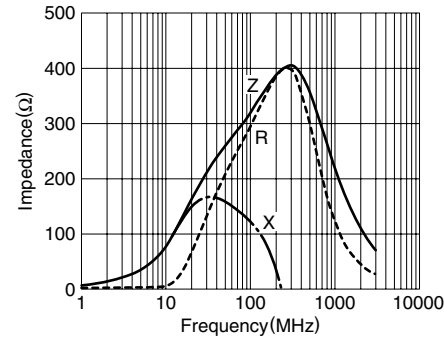
MPZ1608S181A



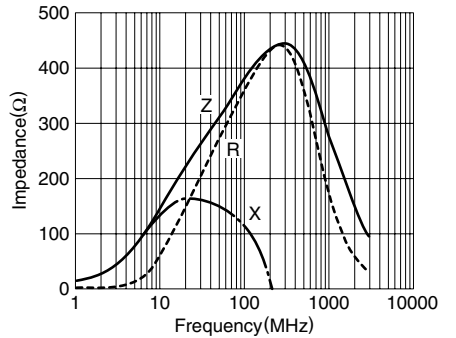
MPZ1608S221A



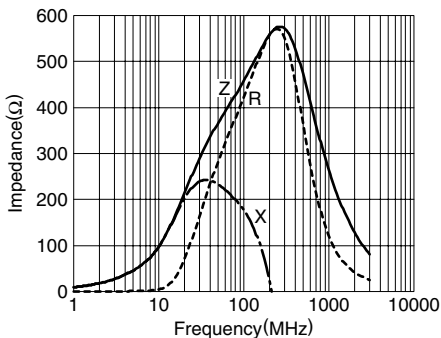
MPZ1608S331A



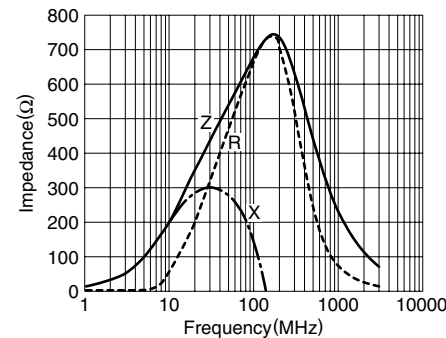
MPZ1608R391A



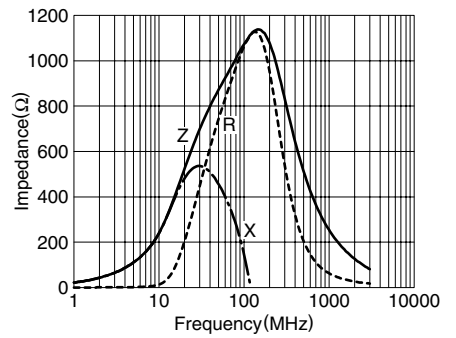
MPZ1608S471A



MPZ1608S601A

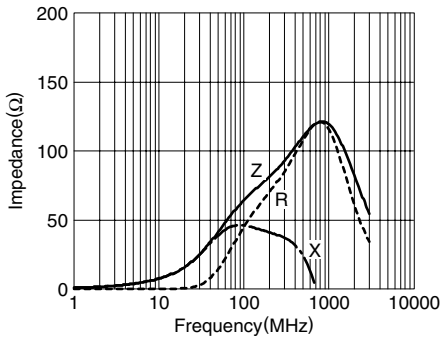


MPZ1608S102A

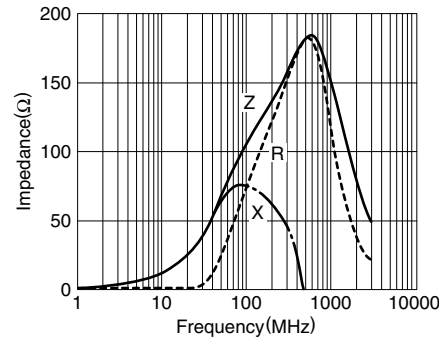


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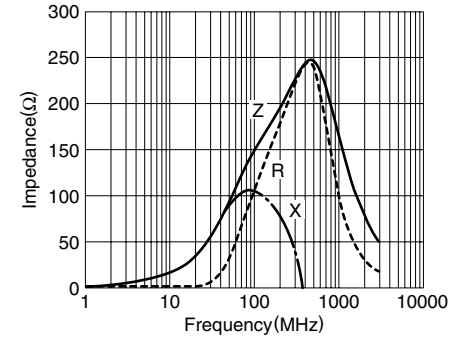
TYPICAL ELECTRICAL CHARACTERISTICS
Z, X, R vs. FREQUENCY CHARACTERISTICS
MPZ1608Y600B



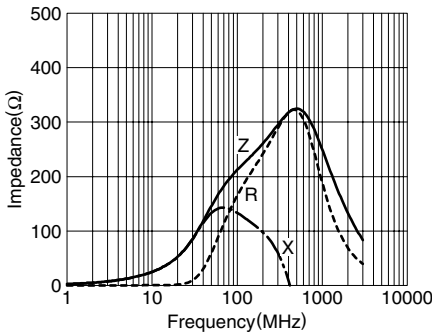
MPZ1608Y101B



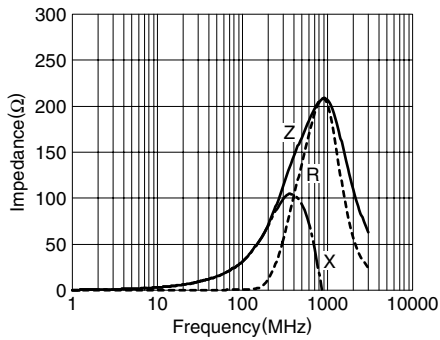
MPZ1608Y151B



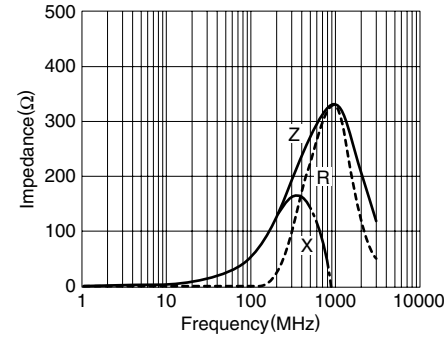
MPZ1608Y221B



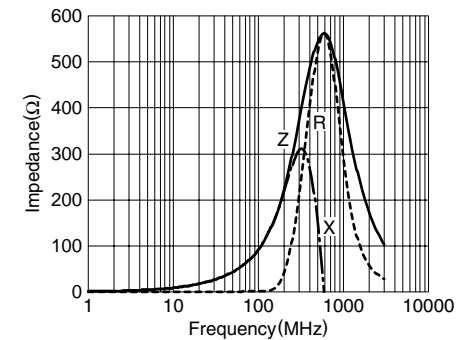
MPZ1608D300B



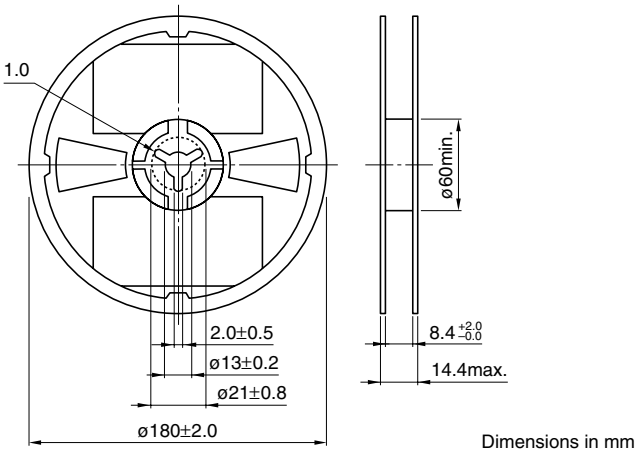
MPZ1608D600B



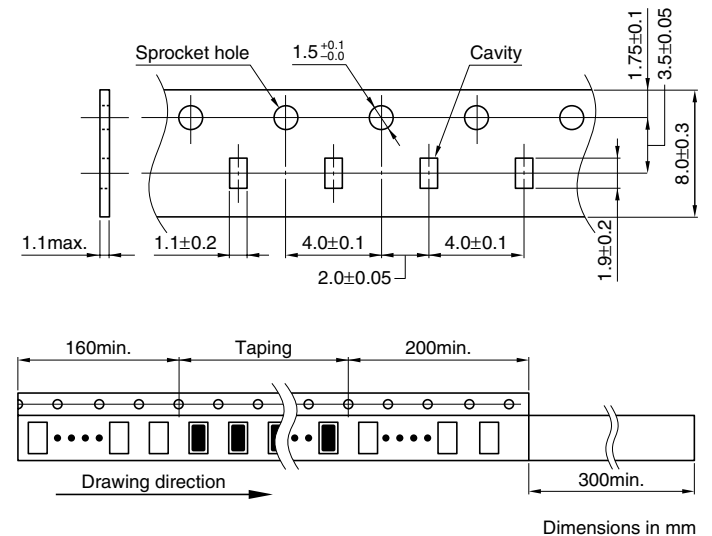
MPZ1608D101B



PACKAGING STYLES
REEL DIMENSIONS



TAPE DIMENSIONS



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Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
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- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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JONHON

«**JONHON**» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«**FORSTAR**» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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