

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Chip beads

For A²B

MPZ-J series

 $MPZ2012-J_{\text{type}}$

MPZ2012-J 2012[0805 inch]*

* Dimensions code: JIS[EIA]

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 less than 12 months. Be sure to follow the storage conditions (temperature: 5 to 40°C, humidity: 10 to 75% RH o less). If the storage period elapses, the soldering of the terminal electrodes may deteriorate.
On 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 therma 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.
On not expose the products to magnets or magnetic fields.
On 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

- (1) Aerospace/aviation equipment
- (2) Transportation equipment (electric trains, ships, etc.)

set forth in the each catalog, please contact us.

(3) Medical equipment

person or property.

- (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.

If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions

EMC Components



Chip beads For A²B

Product compatible with RoHS directive
Halogen-free
Compatible with lead-free solders
AEC-Q200

Overview of MPZ2012-J type

FEATURES

- O Noise reduction solution optimized for A²B.
- O Bus power can be provided in the differential line for low resistance.
- O Impedance is ideal for application that recommend for narrow tolerance specification (±5%).

APPLICATION

Automotive A²B(audiobus)

■ PART NUMBER CONSTRUCTION

MPZ	2012	S	102	J	Т	D25
0	L×W×T dimensions	Madada I a a a a a	Impedance	Characteristic	Da alas sia sa abala	I
Series name	(mm)	Material name	(Ω) at 100MHz	type	Packaging style	Internal code
	2012 2.0×1.25x0.85	S	102 1000	J	T Taping	D25

■ OPERATING TEMPERATURE RANGE, PACKAGE QUANTITY, PRODUCT WEIGHT

	Temperature range		Package quantity	Individual weight
Туре	Operating temperature (°C)	Storage temperature* (°C)	(pieces/reel)	(mg)
MPZ2012-J	-55 to +125	-55 to +125	4.000	8

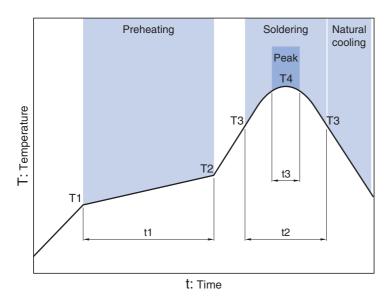
^{*} The storage temperature range is for after the assembly.

RoHS Directive Compliant Product: See the following for more details.https://product.tdk.com/info/en/environment/rohs/index.html

O Halogen-free: Indicates that CI content is less than 900ppm, Br content is less than 900ppm, and that the total CI and Br content is less than 1500ppm.



■ RECOMMENDED REFLOW PROFILE



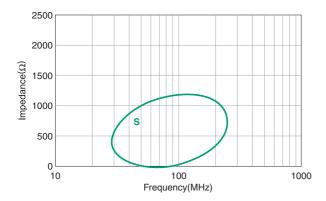
Preheating Soldering Peak Temp. Temp. Time Time Temp. Time T1 T2 Т3 **T4** 150°C 180°C 60 to 120s 230°C 30 to 60s 250 to 260°C 10s



■ MATERIAL CHARACTERISTIC

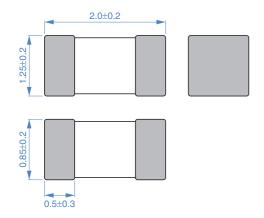
S material: Standard type that features impedance characteristics similar to those of a typical ferrite core. For signal line applications in which the blocking region is near 100MHz. Impedance values selected for effectiveness at 40 to 300MHz.

TYPICAL MATERIAL IMPEDANCE CHARACTERISTICS





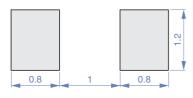
SHAPE & DIMENSIONS





Dimensions in mm

■ RECOMMENDED LAND PATTERN



Dimensions in mm



ELECTRICAL CHARACTERISTICS

CHARACTERISTICS SPECIFICATION TABLE

Impedance		DC resistance	Rated current*	Part No.
[100MHz]				
(Ω)	Tolerance	(Ω)max.	(A)max.	
1000	±25%**	0.150	1.5	MPZ2012S102JTD25

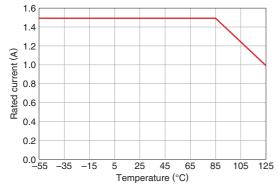
^{*} Please refer to the graph of rated current vs. temperature characteristics (derating) about the rating current at 85°C or more in temperature of the product.

O Measurement equipment

Measurement item	Product No.	Manufacturer	
Impedance	E4991A+16192A	Keysight Technologies	
DC resistance	Type-7556	Yokogawa	

^{*} Equivalent measurement equipment may be used.

\bigcirc Rated current vs. temperature characteristics (derating)



^{**} Same lot impedance tolerance is warranting in Ave±5%.



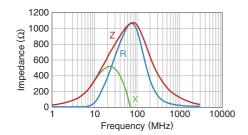
ELECTRICAL CHARACTERISTICS

□ Z VS. FREQUENCY CHARACTERISTICS (BY SERIES) MPZ2012-S series



ELECTRICAL CHARACTERISTICS

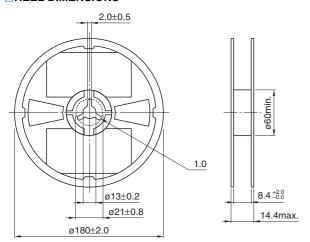
□Z, X, R VS. FREQUENCY CHARACTERISTICS MPZ2012S102JTD25





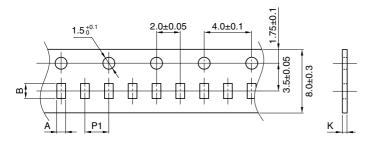
■PACKAGING STYLE

□REEL DIMENSIONS



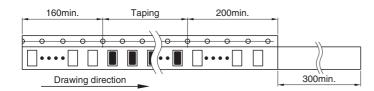
Dimensions in mm

TAPE DIMENSIONS



Dimensions in mm

Туре	Α	В	P1	K
MPZ2012-J	1.5±0.2	2.3±0.2	4.0±0.1	1.1max.



Dimensions in mm

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.