EMC Components

Chip beads For power line MPZ series (for automotive)



⊗TDK





FEATURES

 \bigcirc Noise reduction solution for power line.

O Because of its low DC resistance, it can handle large currents of 10A or more, optimal for low power consumption.

○ The 2520 shape achieves the industry's highest rated current of 12A.

○ Operating temperature range: –55 to +125°C

APPLICATION

O Various ECUs, powertrains, body controls, and car multimedia (telematics).

PART NUMBER CONSTRUCTION

MPZ	2520	S	PH	070	A	Т	D25
Series name	L×W×T dimensions 2.5x2.0x0.85 mm	Material name	Internal code	Impedance (Ω) at 100MHz	Characteristic type	Packaging style	Internal code

CHARACTERISTICS SPECIFICATION TABLE

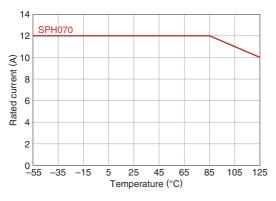
Impedance		DC resistance	Rated curren	it	Part No.
[100MHz]			85°C	125°C	
(Ω)	Tolerance	(m Ω)max.	(A)max.	(A)max.	
7	±3Ω	1.25	12	10	MPZ2520SPH070ATD25

Measurement equipment

Measurement item	Product No.	Manufacturer		
Impedance	4991A+16192A	Keysight Technologies		
DC resistance RM3542+IM9100 HIOKI				
* Equivalent measurement equipment may be used				

* Equivalent measurement equipment may be used.

Rated current vs. temperature characteristics (derating)







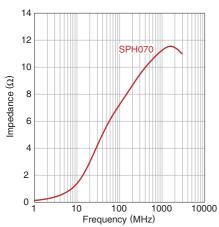
Tél. 01 47 95 99 89 Fax. 01 47 01 16 22

6 22 X

MPZ2520 type

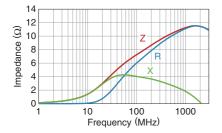
Z VS. FREQUENCY CHARACTERISTICS (BY SERIES)

MPZ2520 series



Z, X, R VS. FREQUENCY CHARACTERISTICS

MPZ2520SPH070ATD25



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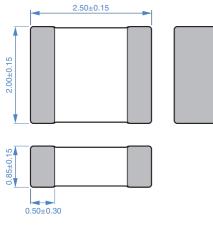
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MPZ2520 type

SHAPE & DIMENSIONS



RECOMMENDED LAND PATTERN

0.7

1.4

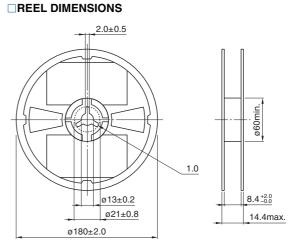
0.7

 (\bigcirc)

Dimensions in mm

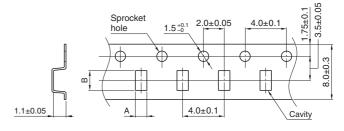
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PACKAGING STYLE



Dimensions in mm

TAPE DIMENSIONS



Dimensions in mm

Туре	А	В
MPZ2520	2.2±0.05	2.7±0.05

160min. Taping 200min.



Dimensions in mm

PACKAGE QUANTITY

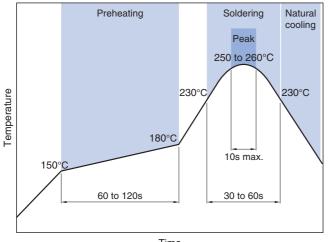
Package quantity 3000 pcs/reel

TEMPERATURE RANGE, INDIVIDUAL WEIGHT

	Operating temperature range	Storage temperature range*	Individual weight
–55 to +125°C		–55 to +125°C	20 mg
* '	The storage temperature range is for after the assembly.		

RECOMMENDED REFLOW PROFILE

Dimensions in mm



Time





Tél. 01 47 95 99 89 Fax. 01 47 01 16 22



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.

\Lambda RE	MINDERS
The storage period is within 12 months. Be sure to follow the s less).	torage conditions (temperature: 5 to 40°C, humidity: 10 to 75% RH o
If the storage period elapses, the soldering of the terminal elect	rodes may deteriorate.
\bigcirc 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 tempera does not exceed 150°C. 	ture difference between the solder temperature and chip temperatur
Soldering corrections after mounting should be within the range If overheated, a short circuit, performance deterioration, or lifes	-
When embedding a printed circuit board where a chip is mount the overall distortion of the printed circuit board and partial distortion	ed to a set, be sure that residual stress is not given to the chip due t ortion such as at screw tightening portions.
 Self heating (temperature increase) occurs when the power is design. 	turned ON, so the tolerance should be sufficient for the set therma
Carefully lay out the coil for the circuit board design of the non-r A malfunction may occur due to magnetic interference.	nagnetic shield type.
\bigcirc Use a wrist band to discharge static electricity in your body thro	ugh the grounding wire.
O Do not expose the products to magnets or magnetic fields.	
O Do not use for a purpose outside of the contents regulated in th	e delivery specifications.
ment, home appliances, amusement equipment, computer eq ment, industrial robots) under a normal operation and use cond The products are not designed or warranted to meet the require ity require a more stringent level of safety or reliability, or whose person or property.	neral electronic equipment (AV equipment, telecommunications equip uipment, personal equipment, office equipment, measurement equip ition. ments of the applications listed below, whose performance and/or qua e failure, malfunction or trouble could cause serious damage to societ or if you have special requirements exceeding the range or condition
 Aerospace/aviation equipment Transportation equipment (electric trains, ships, etc.) Medical equipment Power-generation control equipment Atomic energy-related equipment Seabed equipment Transportation control equipment 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





Tél. 01 47 95 99 89

Fax. 01 47 01 16 22

 \boxtimes

e-mail : comp@es-france.com

Site Web : www.es-france.com