## **Chip Bead Array**

Type: **EXC28B** 



## Features

- Space saving
- SSOP package (0.5 mm pitch) compatibility
- Small size and lightweight
- RoHS compliant

#### Type: EXC28BB

- Suitable for high speed signals (over 50 MHz)
- Excellent cross talk characteristics (100 MHz:<-25 dB)

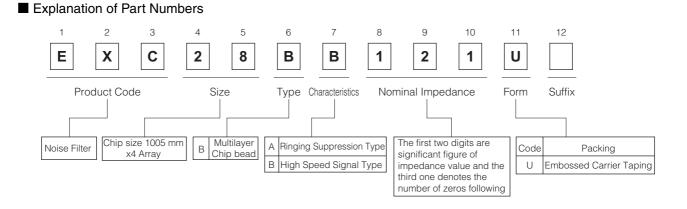
#### Type: EXC28BA

- Reduces waveform ringing noise
- Excellent cross talk characteristics (100 MHz:<-30 dB)

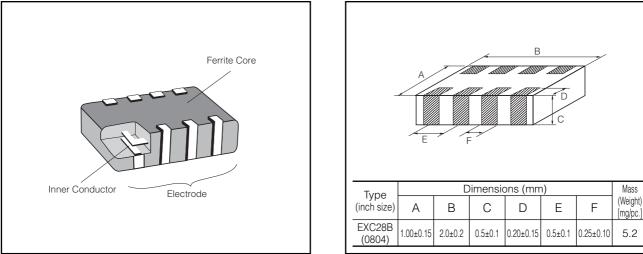
#### Recommended Applications

Dimensions in mm (not to scale)

- Small digital equipment such as PCs, printers, HDD, DVD-ROMs, CD-ROMs, LCDs.
- Digital audio and video equipment such as DSC, DVC, CD Players, DVD Players, MD Players.
- Electronic musical instruments, and other digital equipment.



### Construction



Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

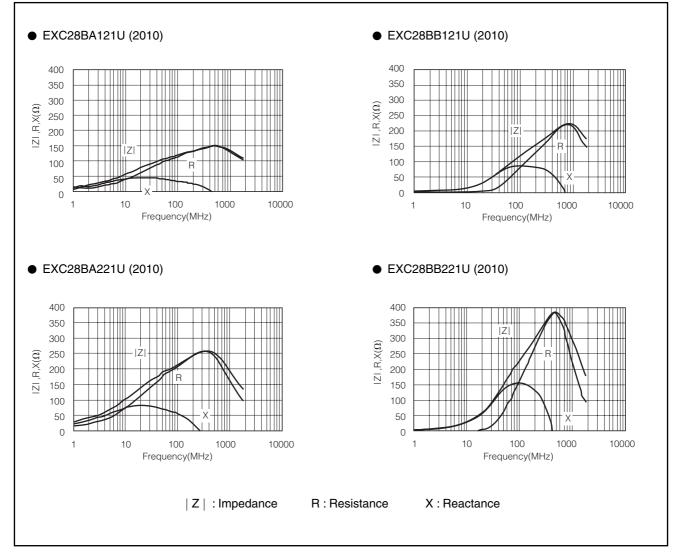
## Panasonic

#### Ratings

Tura a	Davit Nu vrah av	Impedar	ice	Rated Current	DC Resistance
Туре	Part Number	$(\Omega)$ at 100MHz	tol.(%)	(mA DC)	$(\Omega)$ max.
BA	EXC28BA121U	120			0.5
DA	EXC28BA221U	220	. OF	100	0.7
BB	EXC28BB121U	120	±25	100	0.5
DD	EXC28BB221U	220			0.7

● Category Temperature Range –40 °C to +85 °C

### ■ Impedance Characteristics (Reference Data) Measured by HP4291A



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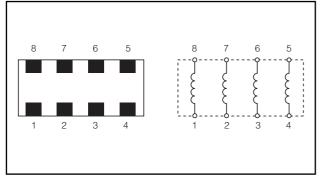
## Panasonic

Т

W

θB

## Circuit Configuration(No Polarity)



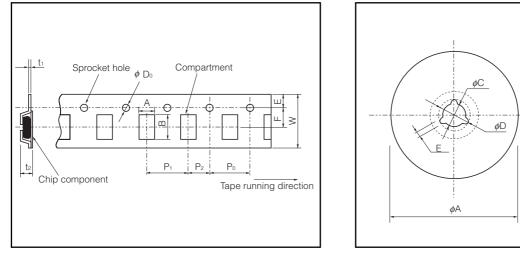
## Packaging Methods (Taping)

• Standard Quantity

Part Number	Kind of Taping	Pitch (P <sub>1</sub> )	Quantity
EXC28B	Embossed Carrier Taping	4 mm	5000 pcs./reel

• Taping Reel

## • Embossed Carrier Taping



#### Embossed Carrier Dimensions (mm)

Part Number	A	В	W	F	E	$P_1$	P <sub>2</sub>	P <sub>0</sub>	$\phi D_0$	t <sub>1</sub>	t <sub>2</sub>
EXC28B	1.20±0.15	2.25±0.15	8.0±0.2	3.5±0.1	1.75±0.10	4.0±0.1	2.0±0.1	4.0±0.1	1.5±0.1	0.25±0.05	0.90±0.15

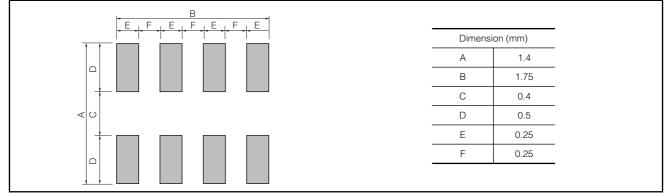
## Standard Reel Dimensions (mm)

Part Number	φA	φB	φC	φD	Е	W	Т
EXC28B	180 <sub>-3.0</sub>	60.0±1.0	13.0±0.5	21.0±0.8	2.0±0.5	9.0±0.3	11.4±1.5

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# Panasonic

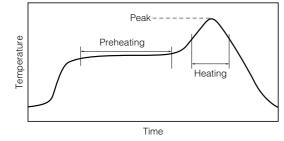
#### Recommended Land Pattern Design



#### Recommended Soldering Conditions

Recommendations and precautions are described below.

- Recommended soldering conditions for reflow
- · Reflow soldering shall be performed a maximum of two times.
- Please contact us for additional information when used in conditions other than those specified.
- Please measure the temperature of the terminals and study every kind of solder and printed circuit board for solderability before actual use.



For soldering (Ex	ample : Sn-37Pb)			
	Temperature Time			
Preheating	140 °C to 160 °C	60 s to 120 s		
Main heating	Above 200 °C	30 s to 40 s		
Peak	235 ± 10 °C	max. 10 s		
For lead-free sold	lering (Example : Si	n/3Ag/0.5Cu)		
	Temperature	Time		
	150 °C to 170 °C	60 s to 120 s		
Preheating		30 s to 40 s		
Preheating Main heating	Above 230 °C	30 5 10 40 5		

#### • Flow soldering

· We do not recommend flow soldering , because flow soldering may cause bridges between the electrodes.

<Repair with hand soldering>

- Preheat with a blast of hot air or similar method. Use a soldering iron with a tip temperature of 350 °C or less. Solder each electrode for 3 seconds or less.
- Never touch this product with the tip of a soldering iron.

### **∆Safety Precautions**

The following are precautions for individual products. Please also refer to the common precautions shown on page 4 of this catalog.

- 1. Use rosin-based flux or halogen-free flux.
- 2. For cleaning, use an alcohol-based cleaning agent. Before using any other type, consult with our sales person in advance.
- 3. Do not apply shock to Chip Bead Array (hereafter called the bead arrays) or pinch them with a hard tool (e.g. pliers and tweezers). Otherwise, their bodies may be chipped, affecting their performance. Excessive mechanical stress may damage the bead arrays. Handle with care.
- 4. Store the bead arrays in a location with a temperature ranging from -5 °C to +40 °C and a relative humidity of 40 % to 60 %, where there are no rapid changes in temperature or humidity.
- 5. Use the bead arrays within half a year after the date of the outgoing inspection indicated on the packages.