## Chip Bead Array

Type: EXC28B

Discontinued

### 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)

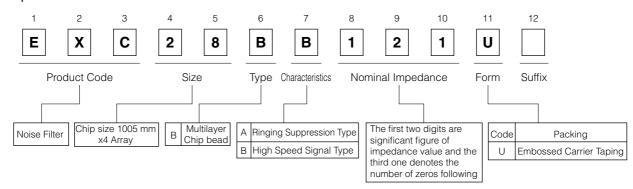
### Type: EXC28BA

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

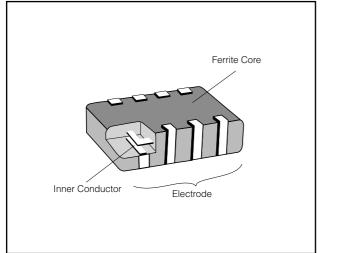


### Recommended Applications

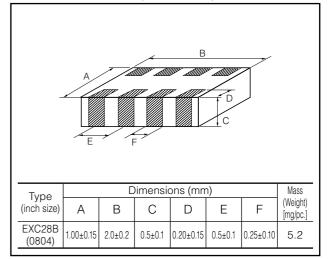
- Small digital equipment such as PCs, printers, HDD, DVD-ROMs, CD-ROMs, LCDs.
- Digital audio and video equipment such as DSC, DVC, CD Players, DVD Players, MD Players.
- Electronic musical instruments, and other digital equipment.



### Construction



### Dimensions in mm (not to scale)



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. 02 Nov. 2012

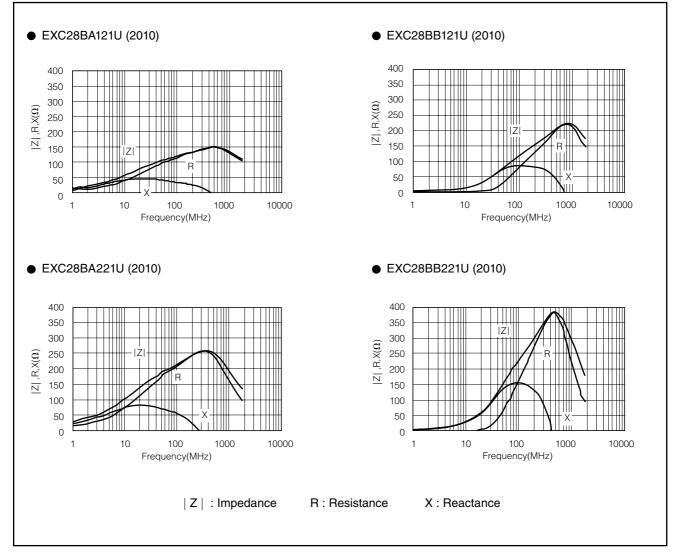
#### Explanation of Part Numbers

## Panasonic

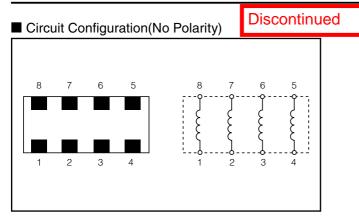
Ratings	Discontinued					
Turp o	Part Number		Impedar	nce	Rated Current	DC Resistance
Туре	Part Number		( $\Omega$ ) at 100MHz	tol.(%)	(mA DC)	( $\Omega$ ) max.
BA	EXC28BA121U	J	120			0.5
DA	EXC28BA221U	J	220	±25	100	0.7
BB	EXC28BB121U	J	120	±25	100	0.5
	EXC28BB221U	J	220			0.7

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

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



## Panasonic

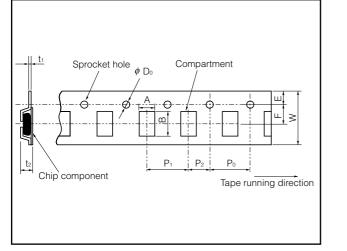


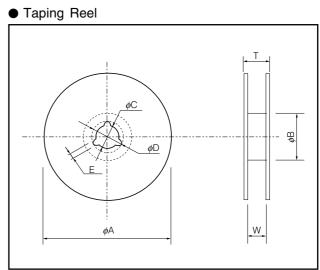
## Packaging Methods (Taping)

Standard Quantity

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

## • Embossed Carrier Taping





### Embossed Carrier Dimensions (mm)

Part Number	А	В	W	F	E	P <sub>1</sub>	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

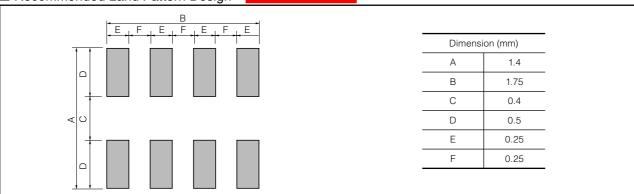
## Standard Reel Dimensions (mm)

Part Number	φA	φB	φC	φD	E	W	Т
EXC28B	180_3.0	60.0±1.0	13.0±0.5	21.0±0.8	2.0±0.5	9.0±0.3	11.4±1.5

# Panasonic

## Recommended Land Pattern Design

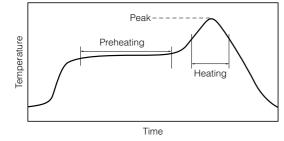




### Recommended Soldering Conditions

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.



or soldering (Exa	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
or lead-free sold	ering (Example : Sr	1/3Ag/0.5Cu)
or lead-free sold	Temperature	Time
For lead-free sold		, 9, ,
	Temperature	Time

### 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 for Noise Suppression Device shown on 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.