# FEED THROUGH CERAMIC CAPACITORS [ PLE Series ]

The feed through type ceramic capacitor has a structure with very low residual inductance. Its resonance frequency reaches the microwave band, offering superior performance for removing unnecessary high-frequency noise.



#### Features

- Because of the multilayer structure, there is only a minimum change of characteristics by soldering and severe thermal cycles.
- When assembled into shield cases, both shielding and filtering can be achieved. Therefore, this
  will be very effective for EMC control.
- Suitable to be assembled into connectors because of the small size. Especially, the PLE123 can be used in 2mm pitch.

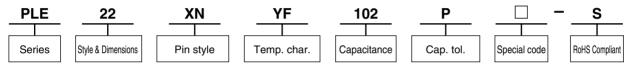
+30~-80%

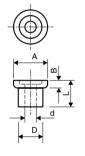
• RoHS Compliant.

#### ■Applications

EMI control for AV, OA equipment, industrial equipment, and communication equipment.

## **■**Part Number System





					Unit : mm
Dimensions Type	A	D	d	В	٦
PLE123	1.85±0.1	1.45±0.1	0.7±0.1	0.5±0.2	2.0max.
PLE12	2.3±0.2	1.9±0.1	0.9±0.1	0.5±0.2	1.5±0.3
PLE22	2.3±0.2	1.9±0.1	0.9±0.1	0.5±0.2	2.4±0.3
PLE32	2.3±0.2	1.9±0.1	0.9±0.1	0.5±0.2	3.5±0.3
PLE255	2.8±0.15	2.4±0.1	1.3±0.1	0.8±0.3	4.0±0.5
PLE23	4.3±0.2	3.0±0.2	1.5±0.1	1.0±0.2	2.5±0.3
PLE33	4.3±0.2	3.0±0.2	1.5±0.1	1.0±0.2	3.5±0.3
PLE335	4.3±0.2	3.5±0.1	1.5±0.1	1.0±0.2	3.5±0.3

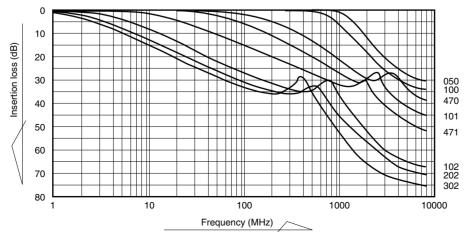
l	Code	Note			
l	CN	No pin			
l	XN	with pin			
	АВ	with pill			
	Refer to pin style on the next page.				

For temperature compensation								
Code	Temp. char.		Code	Сар.		Code	tol.	
SL	P350~N1000 PPM/°C		010	1pF		F	±1pF	
ΥN	N800~N5800 PPM/°C		100	10pF		М	±20%	
High dielectric constant type			101	100pF		z	+80 <sub>%</sub> -20	
Code	Change		102	1000pF		Р	+100 <sub>%</sub> - 0 <sup>%</sup>	
ΥE	+20~-55%	Refer to the part number list on the next page.						

#### **■**Specifications

Class	Temp. char.	IR Rated voltage		Temp. range
For temperature compensation	e compensation SL, YN 5000M $\Omega$ 50Vd		50Vdc	−25~+ 85°C
High dielectric constant type	YE, YF	5000M $\Omega$	50Vdc	−25~+ 85°C
	X7R	5000ΜΩ	50Vdc	–55∼+125°C

#### **■**Insertion loss (Reference)



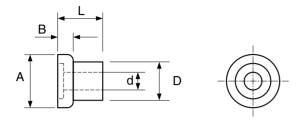
<sup>\*</sup>The PLE123 can be used in 2mm pitch.

Unit: mm

# FEED THROUGH CERAMIC CAPACITORS [ PLE Series ]

# **■**Style & Dimensions

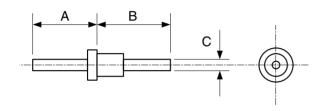
### **Capacitor Dimensions**



					Unit : mm
Type Dimensions	Α	D	d	В	L
PLE123	1.85±0.1	1.45±0.1	0.7±0.1	0.5±0.2	2.0max.
PLE12	2.3 ±0.2	1.9 ±0.1	0.9±0.1	0.5±0.2	1.5±0.3
PLE22	2.3 ±0.2	1.9 ±0.1	0.9±0.1	0.5±0.2	2.4±0.3
PLE32	2.3 ±0.2	1.9 ±0.1	0.9±0.1	0.5±0.2	3.5±0.3
PLE255	2.8 ±0.15	2.4 ±0.1	1.3±0.1	0.8±0.3	4.0±0.5
PLE23	4.3 ±0.2	3.0 ±0.1	1.5±0.1	1.0±0.2	2.5±0.3
PLE33	4.3 ±0.2	3.0 ±0.1	1.5±0.1	1.0±0.2	3.5±0.3
PLE335	4.3 ±0.2	3.5 ±0.1	1.5±0.1	1.0±0.2	3.5±0.3

<sup>\*</sup>The PLE123 can be used in 2mm pitch.

Pin Style Dimensions



Type Dimensions	Α	В	С	Applicable types		
X N	12.5 ±1.0	15.5±1.0	0.65	PLE123		
KN	5.0 ±1.0	10.0±1.0	0.03	FLE 123		
TN	13.0 ±1.0	15.0±1.0	0.80	PLE12, 22, 32		
F U	10.0 ±1.0	10.0±1.0	0.80	1 LL 12, 22, 32		
A Q	8.0 ±1.0	21.0±1.0	1.00	PLE255		
A R	8.0 ±1.0	15.0±1.0	1.00	FLEZUU		
АВ	8.0 ±1.0	7.0±1.0	1.20	PLE23, 33, 335		

Pin type products solderable at low temperature are available for easy assembling. (PLE23, 33, 335 types only) (Special code : SDA)

#### Part Number List

Туре	Temperature characteristics	Capacitance(pF)	Tolerance	Temp. range	Rated voltage	IR	
	SL	10	± 1pF				
PLE123		22	± 20 %				
1 LL 120	ΥE	220	+100 % - 0 %				
	YF	1,000	- 0 /				
	SL	1	± 1pF				
PLE12		10	<u> </u>				
	YE	470	+100 - 0 %				
	YF	1,000	<u>~</u>	_25~+ 85°C		5000M $\Omega$ min.	
	SL	5	± 1pF				
	<u> </u>	22					
PLE22	Y N	47	± 20 %				
PLEZZ		100					
	YE	470					
	YF	1,000	+100 % - 0 %		55~+125°C 50Vdc25~+ 85°C55~+125°C 25~+ 85°C		
		2,000		FF . 105°C			
	X7R	1,200	± 20 %	-55~+125°C			
PLE32	YF	3,000	+ 80 % - 20 %	–25~+ 85°C			
	X7R	1,000	+100 % - 0 %	-55~+125°C			
PLE255	7,711	1,000	- 0 /3				
F LL233	YF	4,700	+80 - 20 %				
	SL	2	± 1pF				
PLE23	ΥE	1,000	+100 % - 0 %				
PLE33	ΥF	2,000	- 0 70	0F . 0F°C			
	SL	100	± 20 %	-25~+ 65 C			
	ΥE	1,000					
	ΥF	2,200	+100 % - 0 %				
DI E225	ΥE	1,000	+100 % - 0 %				
PLE335	ΥF	2,000	- 0 %				

Dimensions and capacitance other than described above are available by request. Please contact our sales department for details.