

### 4. High Power Type PF, PE, PC, PA, PB



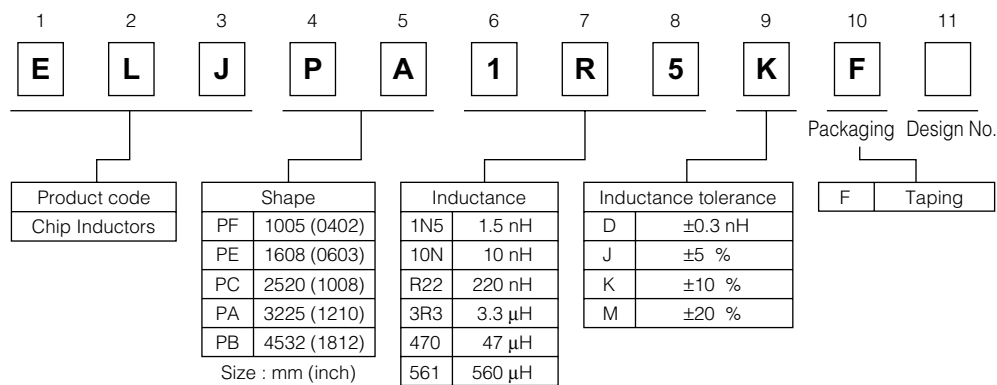
#### ■ Features

- Low DCR and large current capability, suitable for power circuitry.
- Wire wound, resin molded chip inductor. (PC, PA, PB types)
- Unique Ceramic Core/Laser-cut technology (PF, PE type)
- Capable of being Re-flow or flow soldered.
- Wide line-up from 1005 to 4532 case sizes.
- Good for mounting.

#### ■ Recommended Applications

- AV equipment, Wireless communication equipment and various types of general electronic equipment.

#### ■ Explanation of Part Numbers



#### ■ Storage Conditions

- Package : Normal temperature (−5 to 35 °C), normal humidity (85 %RH max.), shall not be exposed to direct sunlight and harmful gases and care should be taken so as not to cause dew.
- Operating Temperature : −20 to +85 °C

#### ■ Storage Period

- Solderability may be reduced due to the conditions of high temperature and high humidity which causes the oxidation of tin-plated terminals. Even if storage conditions are within specified limits, solderability may be reduced with the passage of time. Therefore, please control the storage conditions and try to use the product within 6 months of receipt.

■ Packaging Refer 27 and 28 page.

■ Soldering Conditions Refer 29 page.

■ Safety Precautions Refer 30 page.

■ PF Type 1005 (0402)

● Dimensions in mm (not to scale)

● Recommended Land Pattern in mm (not to scale)



■ Standard Packing Quantity

● 10000 pcs./Reel

■ Standard Parts

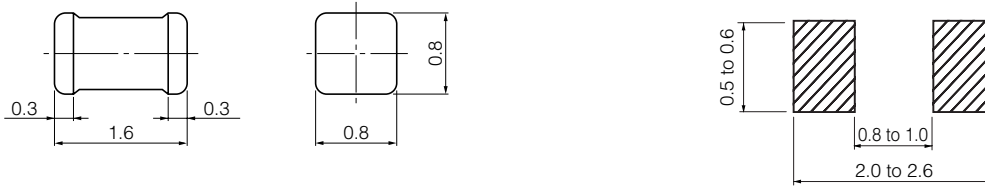
Part No.	Inductance			Q		SRF *1 (MHz) min.	R <sub>DC</sub> *2 (Ω) max.	DC Current (mA) max.
	(nH)	Tolerance (%)	Test Freq. (MHz)	min.	Test Freq. (MHz)			
ELJPF2N2DFB	2.2	D : ±0.3 nH	100	7	100	5300	0.040	1900
ELJPF2N7DFB	2.7					5300	0.050	1800
ELJPF3N3DFB	3.3					5000	0.070	1500
ELJPF3N9DFB	3.9					4800	0.080	1400
ELJPF4N7DFB	4.7					4600	0.100	1300
ELJPF5N6DFB	5.6					4200	0.120	1200
ELJPF6N8JFB	6.8	J : ± 5 %				4000	0.160	1100
ELJPF8N2JFB	8.2					3700	0.210	900
ELJPF10NJFB	10					3200	0.260	750

\*1 : Self Resonant Frequency \*2 : DC Resistance

■ PE Type 1608 (0603)

● Dimensions in mm (not to scale)

● Recommended Land Pattern in mm (not to scale)



■ Standard Packing Quantity

● 3000 pcs./Reel

■ Standard Parts (E12 Series)

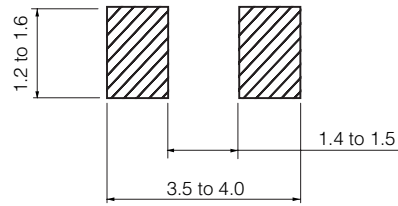
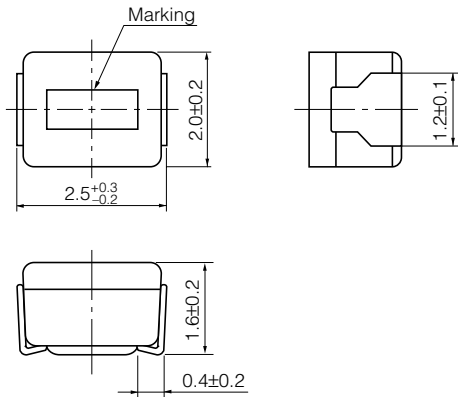
Part No.	Inductance			Q		SRF *1 (MHz) min.	R <sub>DC</sub> *2 (Ω) max.	DC Current (mA) max.
	(nH)	Tolerance (%)	Test Freq. (MHz)	min.	Test Freq. (MHz)			
ELJPE2N2KFA	2.2	K : ± 10 %	100	8	100	6000	0.030	2100
ELJPE2N7KFA	2.7			8		5500	0.030	2100
ELJPE3N3KFA	3.3			8		5500	0.040	2100
ELJPE3N9KFA	3.9			9		5200	0.040	2100
ELJPE4N7KFA	4.7			9		4800	0.050	2100
ELJPE5N6KFA	5.6			9		4600	0.055	2100
ELJPE6N8KFA	6.8			9		4000	0.055	1900
ELJPE8N2KFA	8.2			9		3500	0.060	1700
ELJPE10NKFA	10			9		2800	0.065	1400
ELJPE12NKFA	12			9		2500	0.080	1300
ELJPE15NKFA	15			9		2200	0.100	900
ELJPE18NKFA	18			9		2000	0.120	800
ELJPE22NKFA	22			9		1800	0.150	700

\*1 : Self Resonant Frequency \*2 : DC Resistance

### ■ PC Type 2520 (1008)

● Dimensions in mm (not to scale)

● Recommended Land Pattern in mm (not to scale)



### ■ Standard Packing Quantity

● 2000 pcs./Reel

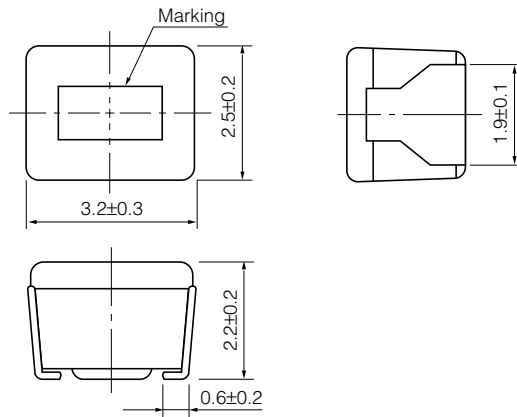
### ■ Standard Parts

Part No.	Inductance			Q		SRF *1 (MHz) min.	R <sub>DC</sub> *2 (Ω) max.	DC Current (mA) max.
	(μH)	Tolerance (%)	Test Freq. (MHz)	min.	Test Freq. (MHz)			
ELJPC1R0MF	1.0	M : ±20 %	7.96	10	7.96	95	0.45	475
ELJPC1R5MF	1.5					85	0.55	435
ELJPC2R2MF	2.2					65	0.65	390
ELJPC3R3MF	3.3			55		0.85	340	
ELJPC4R7MF	4.7			43		1.2	285	
ELJPC6R8KF	6.8	K : ±10 %	2.52	8.5	44	1.3	170	
ELJPC100KF	10			20	2.52	32	2.2	210
ELJPC120KF	12					25	2.7	195
ELJPC150KF	15					21	3.2	175
ELJPC220KF	22					18	4.0	160
ELJPC330KF	33					16	6.5	120

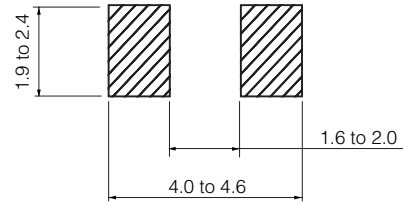
\*1 : Self Resonant Frequency \*2 : DC Resistance

### ■ PA/PA2 Type 3225 (1210)

● Dimensions in mm (not to scale)



● Recommended Land Pattern in mm (not to scale)



### ■ Standard Packing Quantity

● 2000 pcs./Reel

### ■ Standard Parts(PA Type)

Part No.	Inductance			Q		SRF *1 (MHz) min.	R <sub>DC</sub> *2 (Ω) max.	DC Current (mA) max.
	(μH)	Tolerance (%)	Test Freq. (MHz)	min.	Test Freq. (MHz)			
ELJPA1R0MF	1.0	M : ±20 %	7.96	7	7.96	150	0.15	600
ELJPA1R5MF	1.5					110	0.18	550
ELJPA2R2MF	2.2					80	0.23	500
ELJPA3R3MF	3.3					58	0.28	400
ELJPA4R7MF	4.7					46	0.34	350
ELJPA6R8MF	6.8					38	0.42	300
ELJPA100KF	10	K : ±10 %	2.52	15	2.52	23	0.50	240
ELJPA120KF	12					21	0.60	230
ELJPA150KF	15					18	0.74	220
ELJPA180KF	18					17	0.90	205
ELJPA220KF	22					15	1.15	185
ELJPA270KF	27					13	1.45	165
ELJPA330KF	33					12	1.65	155
ELJPA390KF	39					11	1.90	145
ELJPA470KF	47					9.5	2.25	135
ELJPA560KF	56					8.5	3.30	110
ELJPA680KF	68					7.5	3.70	105
ELJPA820KF	82					7.0	4.20	100
ELJPA101KF	100					6.5	5.00	90
ELJPA121KF	120					6.0	7.00	75
ELJPA151KF	150	5.5	8.00	70				
ELJPA181KF	180	0.796	20	0.796	5.0	9.50	65	
ELJPA221KF	220	4.0	11.0	60				
ELJPA271KF	270	3.5	14.5	55				
ELJPA331KF	330	3.0	16.0	50				

\*1 : Self Resonant Frequency \*2 : DC Resistance

### ■ Standard Parts(PA2 Type)

Part No.	Inductance			Self Resonant Frequency (MHz) min.	DC Resistance (Ω)	Rated Current *1 (mA) max.	Saturation Rated Current *2 (mA) max.
	(μH)	Tolerance (%)	Test Freq. (MHz)				
ELJPA2R2MF2	2.2	M : ±20 %	1	70	0.17 ±30 %	800	800
ELJPA4R7MF2	4.7			35	0.23 ±30 %	700	580
ELJPA100KF2	10	K : ±10 %		23	0.35 ±20 %	590	400
ELJPA220KF2	22			15	0.66 ±20 %	420	290
ELJPA330KF2	33			12	1.05 ±20 %	330	240
ELJPA470KF2	47			9.5	1.75 ±20 %	260	200
ELJPA680KF2	68			7.5	3.20 ±20 %	190	160
ELJPA101KF2	100			6.5	3.90 ±20 %	175	130
ELJPA221KF2	220			4.0	8.70 ±20 %	115	85

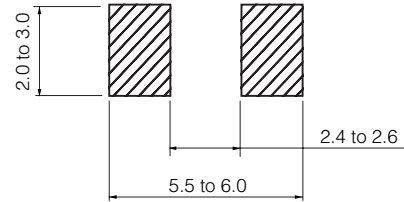
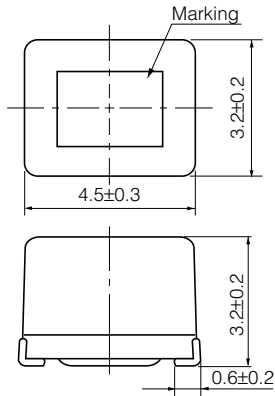
\*1 Rated current is defined by maximum temperature rise of 40 Celsius.

\*2 Saturation Rated Current is defined by 30% change of inductance. -dL/L<-30%

### ■ PB Type 4532 (1812)

● Dimensions in mm (not to scale)

● Recommended Land Pattern in mm (not to scale)



### ■ Standard Packing Quantity

● 500 pcs./Reel

### ■ Standard Parts

Part No.	Inductance			Q		SRF *1 (MHz) min.	R <sub>DC</sub> *2 (Ω) max.	DC Current (mA) max.			
	(μH)	Tolerance (%)	Test Freq. (MHz)	min.	Test Freq. (MHz)						
ELJPB100KF	10	K : ±10 %	2.52	10	2.52	19	0.65	360			
ELJPB120KF	12					17	0.70	340			
ELJPB150KF	15					15	0.80	320			
ELJPB180KF	18					14	0.90	310			
ELJPB220KF	22					13	1.0	300			
ELJPB270KF	27					11	1.2	270			
ELJPB330KF	33					10	1.4	250			
ELJPB390KF	39					9.5	1.6	230			
ELJPB470KF	47					8.5	1.9	210			
ELJPB560KF	56					8	2.2	190			
ELJPB680KF	68					7	2.6	170			
ELJPB820KF	82					6.5	3.5	160			
ELJPB101KF	100					6	4.0	150			
ELJPB121KF	120					5.5	4.5	130			
ELJPB151KF	150					0.796	20	0.796	5	6.5	120
ELJPB181KF	180					4.5	7.5	110			
ELJPB221KF	220	4	9.0	90							

\*1 : Self Resonant Frequency \*2 : DC Resistance