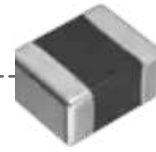


High Current Chip Ferrite Inductors-PI Series



FEATURES

- Monolithic Structure for high reliability, Small size inductor.
- No cross coupling due to magnetic shield. Low DC resistance
- Offset current greatly increased.
- OPERATING TEMP: -55°C ~ +125°C

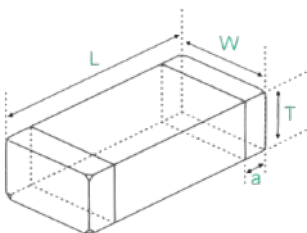
APPLICATIONS

- Tablet terminals, digital cameras, camcorders, hard disks, power modules, etc. DC-DC conversion circuits for mobile phones, wearable devices, DVCs, HDDs, etc

PRODUCT IDENTIFICATION

01 PI	02 1608	—	03 F	04 4R7	05 K	06 T	07 (f)	
01 Type			02 External Dimensions (LxW)(mm)			04 Nominal Inductance		
PI	Chip Ferrite Inductor		1608 [0603]	1.6 x 0.8		Example	Nominal value	
03 Performance Code			2012 [0805]	2.0 x 1.2		R22	0.22uh	
F			2016 [0806]	2.0 x 1.6		4R7	4.7uh	
05 Tolerance			2520 [1008]	2.5 x 2.0		100	10uh	
K	±10%		3216 [1206]	3.2 x 1.6		07 Hazardous Substance Free Products		
M	M: ±20%		06 Packing			(f)		
			T	Tape & Reel				

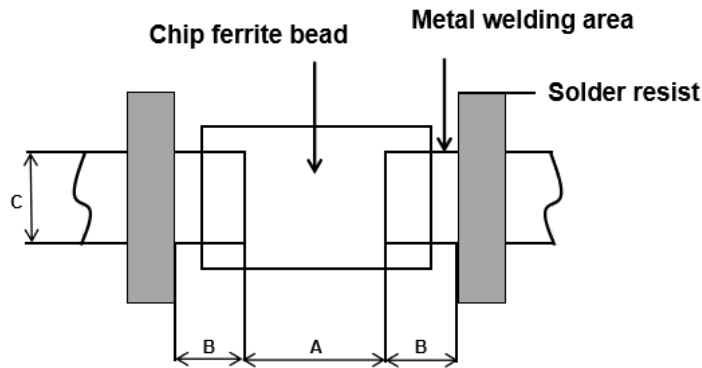
SHAPE AND DIMENSIONS



Part Number	Dimensions(mm)			
	L	W	T	a
PI1608 [0603]	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2
PI2012 [0805]	2.0±0.2	1.2±0.2	0.9±0.2	0.4±0.2
PI2016 [0806]	2.0±0.2	2.0±0.2	0.9±0.2	0.4±0.2
PI2520 [1008]	2.5±0.2	2.0±0.2	0.9±0.2	0.5±0.3
PI3216 [1206]	3.2±0.2	1.6±0.2	0.9±0.2	0.5±0.3



RECOMMENDED PC BOARD PATTERN



Part Number	Dimensions(mm)		
	A	B	C
PI1608	0.6	1.0	0.8
PI2012	1.0	1.0	1.0
PI2016	1.0	1.0	1.0
PI2520	1.5	1.0	1.2
PI3216	2.2	1.1	1.4

SPECIFICATIONS

● PI1608 TYPE

Part Number	Inductance (uH)	Tolerance	L Q Test condition (MHz/V)	SRFmin(MHz)	DCR Max(Ω)	Rated Current Max (mA)
PI1608FR22	0.22	M	1/0.05	150	0.06±30%	380
PI1608FR33	0.33		1/0.05	120	0.08±30%	350
PI1608FR47	0.47		1/0.05	105	0.1±30%	300
PI1608FR68	0.68		1/0.05	85	0.16±30%	220
PI1608FR82	0.82		1/0.05	85	0.18±30%	220
PI1608F1R0	1.0		1/0.05	75	0.2±30%	200
PI1608F1R5	1.5		1/0.05	55	0.25±30%	180
PI1608F1R8	1.8		1/0.05	55	0.3±30%	180
PI1608F2R2	2.2		1/0.05	50	0.50±30%	150
PI1608F4R7	4.7		1/0.05	33	0.75±30%	80



● PI2012 TYPE

Part Number	Inductance (uH)	Tolerance	L Q Test condition (MHz/V)	SRFmin(MHz)	DCR Max(Ω)	Rated Current Max (mA)
PI2012FR10	0.10	M	1/0.05	210	0.14±25%	1100
PI2012FR47	0.47		1/0.05	100	0.15±25%	1100
PI2012F1R0	1.0		1/0.05	90	0.16±25%	800
PI2012F1R5	1.5		1/0.05	70	0.22±25%	700
PI2012F2R2	2.2		1/0.05	50	0.25±25%	600
ZI2012F3R3	3.3		1/0.05	40	0.22±25%	500
PI2012F4R7	4.7		1/0.05	30	0.30±30%	500
PI2012F6R8	6.8		1/0.05	29	0.50±30%	250
PI2012F8R2	8.2		1/0.05	26	0.56	250
PI2012F100	10.0		1/0.05	24	0.56	250
PI2012F120	12.0		1/0.05	22	0.56	250
PI2012F150	15.0		1/0.05	19	0.65	100

● PI2016 TYPE

Part Number	Inductance (uH)	Tolerance	L Q Test condition (MHz/V)	SRFmin(MHz)	DCR Max(Ω)	Rated Current Max (mA)
PI2016FR47	0.47	M	1/0.05	210	0.14±25%	1100
PI2016FR68	0.68		1/0.05	100	0.15±25%	1100
PI2016F1R0	1.0		1/0.05	90	0.16±25%	800
PI2016F1R5	1.5		1/0.05	70	0.22±25%	700
PI2016F2R2	2.2		1/0.05	50	0.25±25%	600
PI2016F3R3	3.3		1/0.05	40	0.22±25%	500
PI2016F4R7	4.7		1/0.05	30	0.30±30%	500



● PI2520 TYPE

Part Number	Inductance (uH)	Tolerance	L Q Test condition (MHz/V)	SRFmin(MHz)	DCR Max(Ω)	Rated Current Max (mA)
PI2520FR47	0.47	M	1/0.05	100	0.07±25%	1800
PI2520FR68	0.68		1/0.05	90	0.09±25%	1700
PI2520F1R0	1.0		1/0.05	60	0.11±25%	1600
PI2520F1R5	1.5		1/0.05	50	0.13±25%	1500
PI2520F2R2	2.2		1/0.05	40	0.17±25%	1300
PI2520F3R3	3.3		1/0.05	30	0.18±25%	1200
PI2520F4R7	4.7		1/0.05	25	0.20±30%	1100

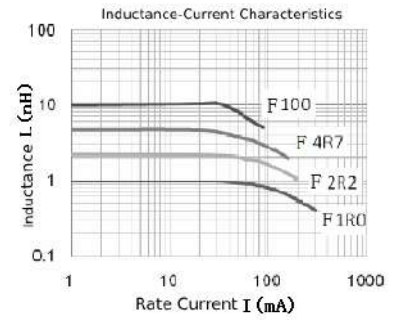
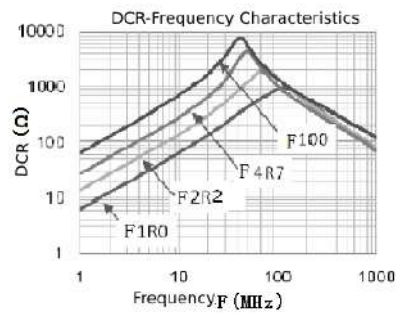
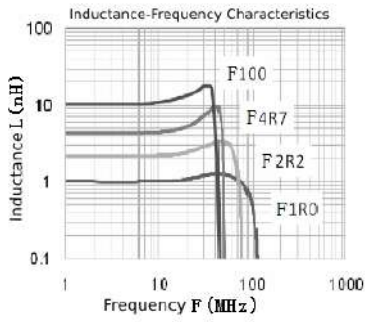
● PI3216 TYPE

Part Number	Inductance (uH)	Tolerance	L Q Test condition (MHz/V)	SRFmin(MHz)	DCR Max(Ω)	Rated Current Max (mA)
PI3216F1R0	1.0	M	1/0.05	60	0.15±25%	1200
PI3216F1R5	1.5		1/0.05	60	0.17±25%	1000
PI3216F2R2	2.2		1/0.05	50	0.24±25%	900
PI3216F3R3	3.3		1/0.05	45	0.30±25%	800
PI3216F4R7	4.7		1/0.05	41	0.30±25%	800
PI3216F6R8	6.8		1/0.05	35	0.38±25%	700
PI3216F8R2	8.2		1/0.05	32	0.42±25%	500
PI3216F100	10.0		1/0.05	29	0.45±25%	500
PI3216F120	12.0		1/0.05	26	0.55±25%	300
PI3216F150	15.0		1/0.05	24	0.55±25%	300
PI3216F220	22.0		1/0.05	19	0.65±25%	100

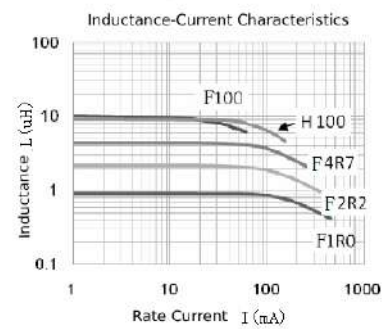
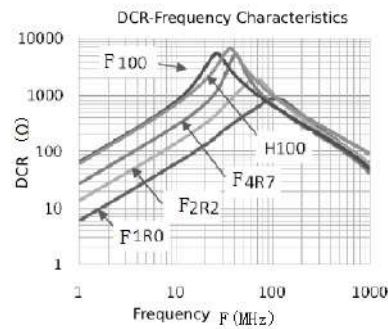
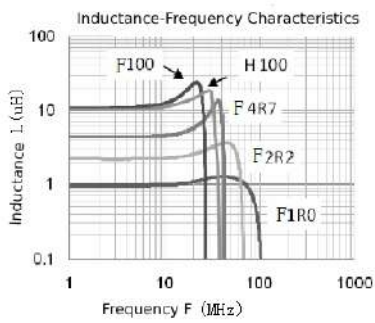


DETAIL ELECTRICAL CHARACTERISTICS

● PI1608



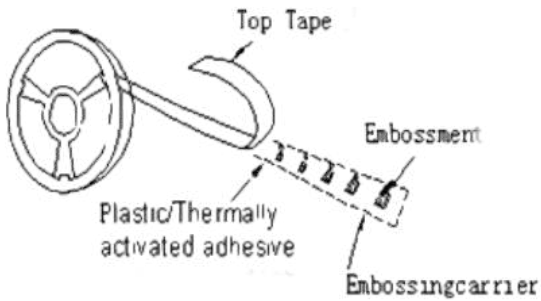
● PI2012



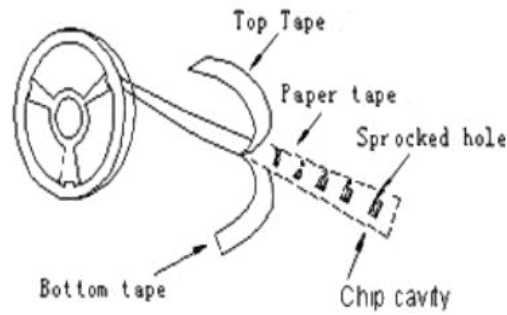
PACKAGING STYLE

• Taping Material

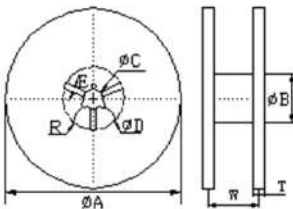
Embossing Tape



Paper Tape



• Reel Dimensions(mm)



Tape Width	A	B	C	D	E	W	T	R
8mm	178±2	60±1	13±0.5	21±0.8	2±0.5	10±1	1.5±0.5	1
12mm	178±2	60±1	13±0.5	21±0.8	2±0.5	14±1	1.5±0.5	1

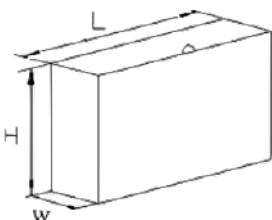
STORAGE

• Quantity

Type	PCS/REEL	PCS/INNERBOX	PCS/OUTERBOX
1608	4000	20000	100000
2012	4000	20000	100000
2016	4000	20000	100000
2520	3000	15000	75000
3216	4000	20000	100000

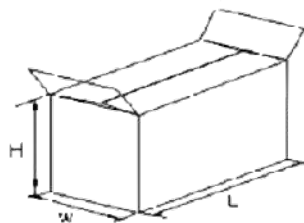
• Packing Dimensions(mm)

Inner Box Dimensions



L	W	H	THICK
180±3	70±3	190±3	2±0.8

Outer Box Dimensions



L	W	H	THICK
370±3	200±3	210±3	2±0.8

• Storage

Please be sure to the parts at 40°C, or less, 70%RH or less, and isolate the parts from sulphic and chloric atmosphere.

