



● FEATURE

1. Multilayer Chip Power Inductor
2. Monolithic structure for high reliability
3. Excellent solderability and high heat resistance
4. No cross coupling due to magnetic shield
5. High DC bias current due to developed material
6. Low DC resistance
7. Operating Temp.: -40°C~+125°C



● APPLICATION

1. DC-DC converter circuits for mobile phones, wearable devices, DVCs, HDDs, etc.

● ORDERING INFORMATION

PIE2012

PN

-2R2

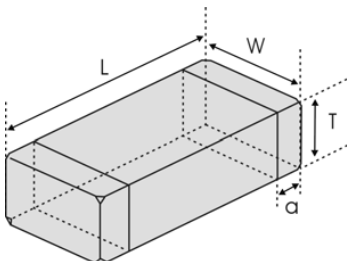
Inductance

T

M:±20%

● SHAPE AND DIMENSION

Unit: mm [inch]



Type	L	W	T	a
PIE2012	2.0 (+0.3, -0.1)	1.25±0.2	0.85±0.2	0.5±0.3
[0805]	[.079 (+.012, -.004)]	[.049±.008]	[.033±.008]	[.020±.012]
PIE2016	2.0 (+0.3, -0.1)	1.6±0.2	0.9±0.1	0.5±0.3
[0806]	[.079 (+.012, -.004)]	[.063±.008]	[.035±.004]	[.020±.012]
PIE2520	2.5±0.2	2.0(+0.3, -0.1)	0.9±0.1	0.5±0.3
[1008]	[.098±.008]	[.079(+.012, -.004)]	[.035±.004]	[.020±.012]



●ELECTRICAL CHARACTERISTICS

PIE2012 TYPE

Part Number	Inductance L(μ H)	Test Freq. f(MHz)	DC Resistance DCR(Ω)	Self-resonant Frequency Min. SRF(MHz)	Saturation Current Typ. Isat(mA)	Heat Rating Current Max. Irms(mA)
PIE2012-2R2M	2.2	1	0.18 \pm 25%	50	300	1300
PIE2012-4R7M	4.7	1	0.30 \pm 25%	60	180	850

PIE2016 TYPE

Part Number	Inductance L(μ H)	Test Freq. f(MHz)	DC Resistance DCR(Ω)	Self-resonant Frequency Min. SRF(MHz)	Saturation Current Typ. Isat(mA)	Heat Rating Current Max. Irms(mA)
PIE2016-1R0M	1.0	1	0.14 \pm 25%	120	900	1100
PIE2016-2R2M	2.2	1	0.22 \pm 25%	70	600	850

PIE2520 TYPE

Part Number	Inductance L(μ H)	Test Freq. f(MHz)	DC Resistance DCR(Ω)	Self-resonant Frequency Min. SRF(MHz)	Saturation Current Typ. Isat(mA)	Heat Rating Current Max. Irms(mA)
PIE2520-2R2M	2.2	1	0.13 \pm 25%	70	500	1400
PIE2520-4R7M	4.7	1	0.28 \pm 25%	45	250	950

※Rated current: Isat or Irms, whichever is smaller;

※Isat: DC current at which the inductance drops approximate 30% from its value without current;

※Irms: DC current that causes the temperature rise ($\Delta T = 40^{\circ}\text{C}$) from 20°C ambient.