

SMD Power Inductors / AFPI Series

Features

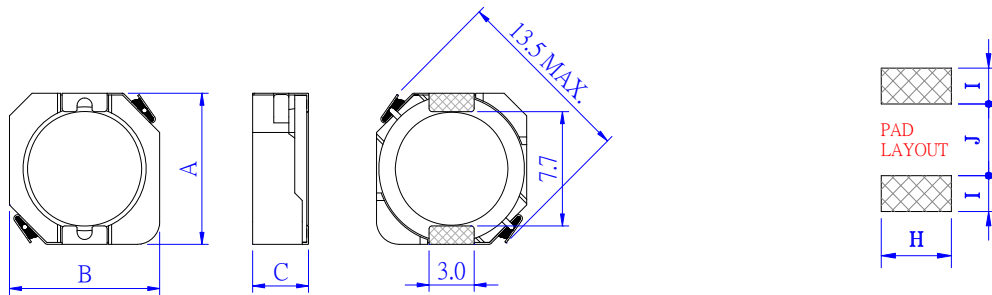
- To be high saturation for surface mounting.
- Surface mounts inductor with high current rating.
- Low resistance to keep power loss minimum.
- Packed in embossed carrier tape and can be used by automatic mounting machine.

Applications

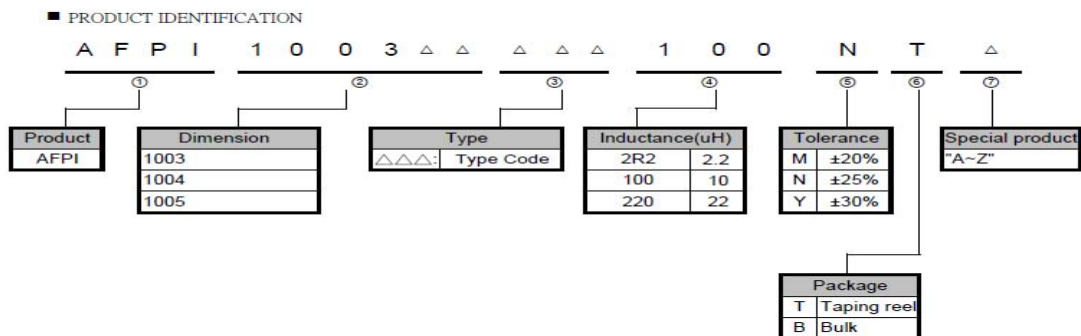
- Excellent as VTR, OA equipment, LCD television sets, notebook PC, portable communication equipments, DC/DC converters, etc.



● Shape & Dimensions



TYPE	A (mm)	B (mm)	C (mm)	H (Ref.)	I (Ref.)	J (Ref.)
AFPI1003	10.5 MAX.	10.3 MAX.	3.1 MAX.	3.6	1.7	7.3
AFPI1004	10.5 MAX.	10.3 MAX.	4.0 MAX.	3.6	1.7	7.3
AFPI1005	10.5 MAX.	10.3 MAX.	5.1 MAX.	3.6	1.7	7.3



◆ AFPI1003 Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (KHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
AFPI10031R5□T	1.5	Y	100	11.0	8.00	5.80
AFPI10032R2□T	2.2	Y	100	16.9	6.70	5.10
AFPI10033R3□T	3.3	Y	100	21.0	5.56	4.70
AFPI10034R7□T	4.7	Y	100	30.0	4.65	4.00
AFPI10036R8□T	6.8	M,N	100	35.0	3.84	3.60
AFPI10038R2□T	8.2	M,N	100	50.0	3.54	3.00
AFPI1003100□T	10	M,N	100	59.0	3.18	2.80
AFPI1003150□T	15	M,N	100	91.0	2.60	2.05
AFPI1003220□T	22	M,N	100	143.0	2.16	1.60
AFPI1003330□T	33	M,N	100	202.0	1.74	1.35
AFPI1003470□T	47	M,N	100	299.0	1.43	1.20
AFPI1003560□T	56	M,N	100	325.0	1.36	1.15
AFPI1003680□T	68	M,N	100	429.0	1.22	0.95
AFPI1003820□T	82	M,N	100	494.0	1.14	0.80
AFPI1003101□T	100	M,N	100	683.0	1.02	0.70
AFPI1003121□T	120	M,N	100	754.0	0.89	0.65
AFPI1003151□T	150	M,N	100	871.0	0.84	0.51

NOTE :

* The operating temperature range is -40°C to $+105^{\circ}\text{C}$ (Including self-temperature rise).

* □ Tolerance M : $\pm 20\%$, N : $\pm 25\%$, Y : $\pm 30\%$

*Isat:For Inductance drop 35% from its value without current.

*Irms:The value of D.C current when the temperature rise is $\Delta T \leq 40^{\circ}\text{C}$ ($T_a=25^{\circ}\text{C}$).

◆ AFPI1004 Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (KHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
AFPI10041R5□T	1.5	Y	100	8.1	10.00	6.50
AFPI10042R5□T	2.5	Y	100	10.5	7.50	6.10
AFPI10043R8□T	3.8	Y	100	13.0	6.00	5.50
AFPI10045R2□T	5.2	M,N	100	22.0	5.50	5.40
AFPI10047R0□T	7.0	M,N	100	34.0	4.80	4.50
AFPI1004100□T	10	M,N	100	35.0	4.40	3.80
AFPI1004150□T	15	M,N	100	50.0	3.60	3.10
AFPI1004220□T	22	M,N	100	73.0	2.90	2.50
AFPI1004330□T	33	M,N	100	105.0	2.30	2.20
AFPI1004470□T	47	M,N	100	128.0	2.10	1.90
AFPI1004680□T	68	M,N	100	213.0	1.50	1.42
AFPI1004101□T	100	M,N	100	304.0	1.35	1.25
AFPI1004151□T	150	M,N	100	506.0	1.15	0.85
AFPI1004221□T	220	M,N	100	756.0	0.92	0.70
AFPI1004331□T	330	M,N	100	1090.0	0.70	0.52

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* Irms: The value of D.C current when the temperature rise is $\Delta T \leq 40^{\circ}\text{C}$ ($T_a = 25^{\circ}\text{C}$).

◆ AFPI1005 Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (KHz)	DCR ($m\Omega$) Max.	Saturation Current (A) Max.	Temp. Rise current (A) Max.
AFPI10051R0□T	1.0	Y	100	7.0	10.00	10.50
AFPI10051R5□T	1.5	Y	100	5.8	8.30	10.50
AFPI10052R2□T	2.2	Y	100	7.2	7.50	9.25
AFPI10053R3□T	3.3	Y	100	10.4	6.50	7.80
AFPI10054R7□T	4.7	Y	100	12.3	6.10	6.40
AFPI10056R8□T	6.8	M,N	100	18.0	5.40	5.40
AFPI10058R2□T	8.2	M,N	100	20.0	5.00	4.85
AFPI1005100□T	10	M,N	100	26.0	4.50	4.45
AFPI1005120□T	12	M,N	100	33.0	3.80	4.00
AFPI1005150□T	15	M,N	100	41.0	3.40	3.60
AFPI1005180□T	18	M,N	100	46.0	3.10	3.20
AFPI1005220□T	22	M,N	100	61.0	2.95	2.90
AFPI1005270□T	27	M,N	100	69.0	2.60	2.70
AFPI1005330□T	33	M,N	100	84.0	2.50	2.40
AFPI1005390□T	39	M,N	100	106.0	2.25	2.30
AFPI1005470□T	47	M,N	100	130.0	2.00	2.00
AFPI1005560□T	56	M,N	100	149.0	1.90	1.90
AFPI1005680□T	68	M,N	100	201.0	1.60	1.65
AFPI1005820□T	82	M,N	100	227.0	1.45	1.50
AFPI1005101□T	100	M,N	100	253.0	1.35	1.35
AFPI1005121□T	120	M,N	100	303.0	1.18	1.28
AFPI1005151□T	150	M,N	100	370.0	1.10	1.12
AFPI1005181□T	180	M,N	100	419.0	1.00	1.04
AFPI1005221□T	220	M,N	100	500.0	0.94	0.94
AFPI1005271□T	270	M,N	100	672.0	0.80	0.84
AFPI1005331□T	330	M,N	100	812.0	0.73	0.75
AFPI1005391□T	390	M,N	100	953.0	0.70	0.70
AFPI1005471□T	470	M,N	100	1289.0	0.54	0.60
AFPI1005561□T	560	M,N	100	1430.0	0.52	0.54
AFPI1005681□T	680	M,N	100	1599.0	0.51	0.52
AFPI1005821□T	820	M,N	100	1768.0	0.48	0.50
AFPI1005102□T	1000	M,N	100	1989.0	0.42	0.48

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