●FEATURE

1. Low profile and Compact size
2. Low DC resistance
3. Magnetic Shielding type

2DXX 5DXX

3DXX

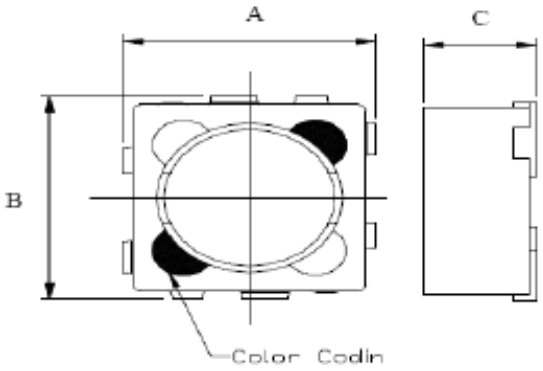
●APPLICATION

1. LCD panels
2. Digital camera,PDA and others portable

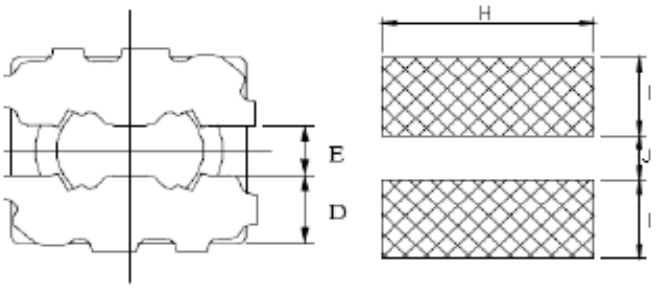
●ORDERING INFORMATION

PIU5D12	-R47	T
PN	Inductance	M :±20%

●SHAPE AND DIMENSION



●SCHEMATICS AND LAND PATTERNS(mm)

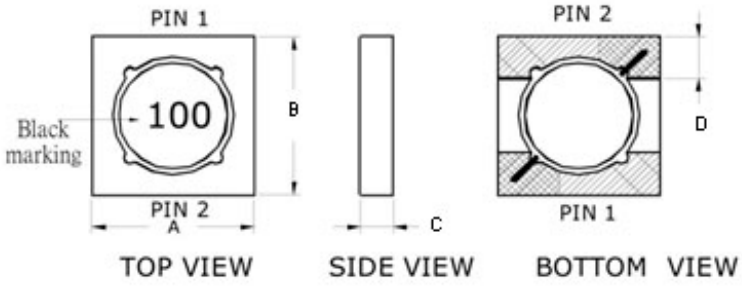


●SPECIFICATION

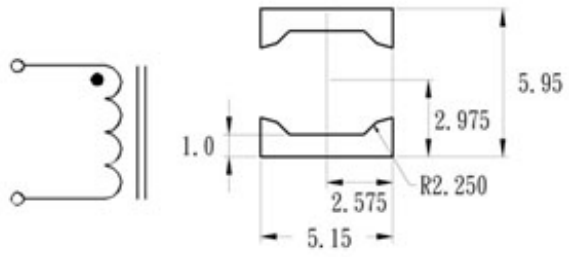
Dimension in mm

TYPE	A	B	C	D	E	H	I	J
PIU2D10	3.2±0.2	3.2±0.2	1.05	1.1	0.8	3.6	1.4	0.8
PIU2D15	3.2±0.2	3.2±0.2	1.6	1.1	0.8	3.6	1.4	0.8
PIU2D18	3.2±0.2	3.2±0.2	1.8	1.1	0.8	3.6	1.4	0.8
PIU3D12	4.2±0.2	4.2±0.2	1.25	1.3	1.4	4.6	1.6	1.4
PIU3D15	4.2±0.2	4.2±0.2	1.6	1.3	1.4	4.6	1.6	1.4
PIU3D18	4.2±0.2	4.2±0.2	1.8	1.3	1.4	4.6	1.6	1.4

●SHAPE AND DIMENSION



●SCHEMATICS AND LAND PATTERNS(mm)



TYPE	A	B	C	D
PIU5D12	5.30MAX	5.30MAX	1.20MAX	1.5REF.
PIU5D14	5.20MAX	5.20MAX	1.45MAX	1.5REF.
PIU5D18	5.20MAX	5.20MAX	1.80MAX	1.5REF.
PIU5D20	5.20MAX	5.20MAX	2.00MAX	1.5REF.
PIU5D25	5.20MAX	5.20MAX	2.50MAX	1.5REF.

Note1. Measurement ambient temperature of L, DCR and IDC : at 25°C
Note2. Isat: DC current at which the inductance drops 30% from its value without current
Note3. Irms: Average current for 40℃ temperature rise from 25°C ambient
Note4. Inductance tolerance: M: ±20%
Note5. This specification might be changed without notice due to under developing and improving.

●ELECTRICAL CHARACTERISTICS

PART NUMBER	L (uH)	DCR (Ω) Typ.	IDC(A) Typ.		I rms(A) Typ.
			L drop 10%	L drop 35%	
PIU2D10-1R2Y	1.2	0.070	1.00	1.40	1.50
PIU2D10-1R5Y	1.5	0.087	1.00	1.36	1.40
PIU2D10-1R8Y	1.8	0.097	0.90	1.24	1.35
PIU2D10-2R2Y	2.2	0.136	0.80	0.97	1.10
PIU2D10-2R7Y	2.7	0.127	0.76	0.94	1.10
PIU2D10-3R3Y	3.3	0.175	0.68	0.88	1.00
PIU2D10-3R9Y	3.9	0.200	0.62	0.84	0.90
PIU2D10-4R7Y	4.7	0.274	0.60	0.82	0.85
PIU2D10-5R6Y	5.6	0.319	0.54	0.72	0.75
PIU2D10-6R8Y	6.8	0.330	0.46	0.60	0.70
PIU2D10-8R2Y	8.2	0.420	0.44	0.58	0.65
PIU2D10-100M	10	0.470	0.42	0.54	0.60
PIU2D10-120M	12	0.675	0.32	0.44	0.55
PIU2D10-150M	15	0.800	0.30	0.40	0.50
PIU2D10-180M	18	0.890	0.30	0.38	0.45
PIU2D10-220M	22	1.110	0.26	0.32	0.40
PIU2D10-270M	27	1.600	0.24	0.30	0.34
PIU2D10-330M	33	1.600	0.22	0.28	0.34
PIU2D10-470M	47	2.430	0.18	0.22	0.24

Note1: Test Condition: 1kHz, 1V

Note2: Tolerance Y=M: ±20%, N±30%

PART NUMBER	L (uH)	DCR (Ω) Typ.	IDC(A) Typ.		I rms(A) Typ.
			L drop 10%	L drop 35%	
PIU3D12-1R0Y	1.0	0.045	2.30	3.00	2.00
PIU3D12-1R2Y	1.2	0.048	2.20	2.80	1.90
PIU3D12-1R5Y	1.5	0.055	1.90	2.40	1.80
PIU3D12-1R8Y	1.8	0.073	1.80	2.30	1.75
PIU3D12-2R2Y	2.2	0.083	1.70	2.10	1.75
PIU3D12-2R7Y	2.7	0.109	1.40	1.70	1.44
PIU3D12-3R3Y	3.3	0.118	1.30	1.70	1.40
PIU3D12-3R9Y	3.9	0.143	1.26	1.60	1.30
PIU3D12-4R7Y	4.7	0.159	1.24	1.58	1.20
PIU3D12-5R6Y	5.6	0.213	1.00	1.30	1.00
PIU3D12-6R8Y	6.8	0.224	1.00	1.30	0.96
PIU3D12-8R2Y	8.2	0.252	0.92	1.14	0.94
PIU3D12-100M	10	0.327	0.86	1.06	0.90
PIU3D12-120M	12	0.363	0.80	0.98	0.82
PIU3D12-150M	15	0.516	0.60	0.80	0.64
PIU3D12-180M	18	0.625	0.56	0.76	0.60
PIU3D12-220M	22	0.732	0.46	0.64	0.52
PIU3D12-330M	33	1.165	0.42	0.50	0.42

Note1: Test Condition: 1kHz, 1V

Note2: Tolerance Y=M: ±20%, N±30%

PART NUMBER	L (uH)	DCR (Ω) Typ.	IDC(A) Typ.		I rms(A) Typ.
			L drop 10%	L drop 35%	
PIU3D15-R50N	0.5	0.035	3.10	3.90	2.50
PIU3D15-1R0Y	1.0	0.040	2.30	3.00	2.40
PIU3D15-1R2Y	1.2	0.043	2.20	2.80	2.34
PIU3D15-1R5Y	1.5	0.050	2.00	2.60	2.30
PIU3D15-1R8Y	1.8	0.055	1.66	2.30	2.10
PIU3D15-2R2Y	2.2	0.071	1.60	2.20	2.00
PIU3D15-2R7Y	2.7	0.078	1.40	2.00	1.60
PIU3D15-3R3Y	3.3	0.087	1.34	2.00	1.60
PIU3D15-3R9Y	3.9	0.100	1.20	1.80	1.50
PIU3D15-4R7Y	4.7	0.137	1.14	1.60	1.40
PIU3D15-5R6Y	5.6	0.147	1.06	1.46	1.20
PIU3D15-6R8Y	6.8	0.170	1.00	1.40	1.15
PIU3D15-8R2Y	8.2	0.195	0.94	1.28	1.10
PIU3D15-100M	10	0.228	0.90	1.16	1.02
PIU3D15-120M	12	0.275	0.88	1.08	0.90
PIU3D15-150M	15	0.340	0.64	0.86	0.72
PIU3D15-180M	18	0.380	0.60	0.82	0.68
PIU3D15-220M	22	0.495	0.54	0.74	0.65
PIU3D15-270M	27	0.735	0.50	0.70	0.55
PIU3D15-330M	33	0.890	0.46	0.58	0.48
PIU3D15-390M	39	1.000	0.40	0.56	0.42
PIU3D15-470M	47	1.150	0.34	0.52	0.35

Note1: Test Condition: 1kHz, 1V

Note2: Tolerance Y=M: ±20%, N±30%

PART NUMBER	L (uH)	DCR (Ω) Typ.	IDC(A) Typ.		I rms(A) Typ.
			L drop 10%	L drop 35%	
PIU3D18-1R0Y	1.0	0.038	2.60	3.20	2.40
PIU3D18-1R2Y	1.2	0.044	2.40	3.00	2.20
PIU3D18-1R5Y	1.5	0.050	2.20	2.70	2.20
PIU3D18-1R8Y	1.8	0.045	1.90	2.40	2.00
PIU3D18-2R2Y	2.2	0.062	1.80	2.20	1.90
PIU3D18-2R7Y	2.7	0.068	1.70	2.10	1.80
PIU3D18-3R3Y	3.3	0.080	1.50	1.88	1.65
PIU3D18-3R9Y	3.9	0.084	1.40	1.80	1.56
PIU3D18-4R7Y	4.7	0.099	1.22	1.46	1.40
PIU3D18-5R6Y	5.6	0.110	1.16	1.48	1.30
PIU3D18-6R8Y	6.8	0.128	1.02	1.26	1.20
PIU3D18-8R2Y	8.2	0.146	1.000	1.24	1.15
PIU3D18-100M	10	0.165	0.90	1.10	1.05
PIU3D18-120M	12	0.254	0.84	1.00	0.80
PIU3D18-150M	15	0.320	0.74	0.88	0.72
PIU3D18-180M	18	0.360	0.70	0.84	0.68
PIU3D18-220M	22	0.418	0.60	0.74	0.65
PIU3D18-270M	27	0.450	0.56	0.70	0.60
PIU3D18-330M	33	0.620	0.46	0.58	0.58
PIU3D18-390M	39	0.650	0.45	0.56	0.48
PIU3D18-470M	47	0.790	0.43	0.52	0.45
PIU3D18-560M	56	0.862	0.38	0.48	0.40
PIU3D18-680M	68	1.000	0.30	0.40	0.36
PIU3D18-101M	100	1.380	0.26	0.32	0.36

Note1: Test Condition: 1kHz, 1V

Note2: Tolerance Y=M: ±20%, N±30%

PART NUMBER	L (uH)	DCR (Ω) Typ.	IDC(A) Typ.		I rms(A) Typ.
			L drop 10%	L drop 35%	
PIU2D15L-1R0Y	1.0	0.038	1.04	1.40	1.80
PIU2D15L-1R2Y	1.2	0.041	1.00	1.30	1.74
PIU2D15L-1R5Y	1.5	0.046	0.94	1.22	1.70
PIU2D15L-1R8Y	1.8	0.058	0.92	1.16	1.64
PIU2D15L-2R2Y	2.2	0.066	0.88	1.10	1.60
PIU2D15L-2R7Y	2.7	0.070	0.74	0.93	1.45
PIU2D15L-3R3Y	3.3	0.091	0.68	0.90	1.24
PIU2D15L-3R9Y	3.9	0.115	0.62	0.82	1.12
PIU2D15L-4R7Y	4.7	0.132	0.60	0.74	1.10
PIU2D15L-5R6Y	5.6	0.156	0.58	0.70	1.06
PIU2D15L-6R8Y	6.8	0.166	0.42	0.62	1.00
PIU2D15L-8R2Y	8.2	0.230	0.40	0.58	0.90
PIU2D15L-100M	10	0.244	0.38	0.50	0.80
PIU2D15L-120M	12	0.324	0.36	0.44	0.70
PIU2D15L-150M	15	0.370	0.36	0.42	0.70
PIU2D15L-180M	18	0.489	0.30	0.38	0.62

PART NUMBER	L (uH)	DCR (Ω) Typ.	IDC(A) Typ.		I rms(A) Typ.
			L drop 10%	L drop 35%	
PIU2D18L-1R0Y	1.0	0.038	0.96	1.36	1.80
PIU2D18L-1R2Y	1.2	0.041	0.94	1.22	1.76
PIU2D18L-1R5Y	1.5	0.048	0.90	1.14	1.70
PIU2D18L-1R8Y	1.8	0.052	0.84	1.04	1.68
PIU2D18L-2R2Y	2.2	0.055	0.75	0.95	1.64
PIU2D18L-2R7Y	2.7	0.060	0.68	0.90	1.46
PIU2D18L-3R3Y	3.3	0.078	0.60	0.80	1.40
PIU2D18L-3R9Y	3.9	0.090	0.58	0.80	1.22
PIU2D18L-4R7Y	4.7	0.099	0.54	0.74	1.20
PIU2D18L-5R6Y	5.6	0.110	0.50	0.66	1.12
PIU2D18L-6R8Y	6.8	0.120	0.48	0.60	1.06
PIU2D18L-8R2Y	8.2	0.168	0.40	0.54	0.90
PIU2D18L-100M	10	0.190	0.36	0.46	0.88
PIU2D18L-120M	12	0.222	0.32	0.46	0.80
PIU2D18L-150M	15	0.285	0.30	0.40	0.72
PIU2D18L-180M	18	0.350	0.28	0.38	0.66
PIU2D18L-220M	22	0.440	0.24	0.32	0.50
PIU2D18L-270M	27	0.490	0.22	0.28	0.42

Note1: Test Condition: 1kHz, 1V

Note2: Tolerance Y=M: ±20%, N±30%

PART NUMBER	L (uH)	DCR (Ω) Typ.	IDC(A) Typ.		I rms(A) Typ.
			L drop 10%	L drop 35%	
PIU2D15H-R47Y	0.47	0.040	3.00	3.40	2.20
PIU2D15H-1R0Y	1.0	0.049	2.60	3.00	2.00
PIU2D15H-1R2Y	1.2	0.083	2.30	2.50	1.90
PIU2D15H-1R5Y	1.5	0.090	2.10	2.50	1.50
PIU2D15H-2R2Y	2.2	0.090	1.80	2.10	1.28
PIU2D15H-3R3Y	3.3	0.149	1.50	1.72	1.10
PIU2D15H-3R9Y	3.9	0.158	1.40	1.56	1.02
PIU2D15H -4R7Y	4.7	0.197	1.30	1.50	0.96
PIU2D15H-5R6Y	5.6	0.232	1.20	1.30	0.94
PIU2D15H-6R8Y	6.8	0.266	1.10	1.30	0.84
PIU2D15H-100M	10	0.403	0.94	1.10	0.74
PIU2D15H-150M	15	0.567	0.76	0.86	0.60
PIU2D15H-220M	22	0.905	0.60	0.68	0.46
PIU2D15H-330M	33	1.486	0.44	0.48	0.40
PIU2D15H-470M	47	1.814	0.40	0.44	0.26
PIU2D15H-680M	68	3.520	0.29	0.33	0.26
PIU2D15H-101M	100	3.840	0.24	0.28	0.24

PART NUMBER	L (uH)	DCR (Ω) Typ.	IDC(A) Typ.		I rms(A) Typ.
			L drop 10%	L drop 35%	
PIU2D18H-1R0Y	1.0	0.045	2.60	3.00	2.00
PIU2D18H-1R8Y	1.8	0.078	2.00	2.30	1.76
PIU2D18H-2R2Y	2.2	0.090	1.80	2.14	1.44
PIU2D18H-3R3Y	3.3	0.103	1.50	1.80	1.10
PIU2D18H-3R9Y	3.9	0.115	1.50	1.78	1.05
PIU2D18H-4R7Y	4.7	0.152	1.40	1.60	1.00
PIU2D18H-6R8Y	6.8	0.223	1.20	1.40	0.95
PIU2D18H-100M	10	0.360	0.92	1.02	0.78
PIU2D18H-120M	12	0.410	0.84	0.98	0.68
PIU2D18H-150M	15	0.622	0.80	0.90	0.62
PIU2D18H-220M	22	0.750	0.64	0.74	0.45
PIU2D18H-330M	33	1.125	0.47	0.52	0.42

Note1: Test Condition: 1kHz, 1V

Note2: Tolerance Y=M: ±20%, N±30%

PART NUMBER	L (uH)	DCR (ΩTyp.)	Isat (A)	Irms (A)
PIU5D12-R47M	0.47±20%	0.0246	3.86	3.19
PIU5D12-1R2M	1.20±20%	0.0366	2.45	2.62
PIU5D12-1R5M	1.50±20%	0.0521	2.08	2.19
PIU5D12-2R2M	2.20±20%	0.0747	1.80	1.83
PIU5D12-3R3M	3.30±20%	0.1043	1.42	1.55
PIU5D12-4R7M	4.70±20%	0.1177	1.29	1.46
PIU5D12-6R2M	6.20±20%	0.1699	1.08	1.21
PIU5D12-6R8M	6.80±20%	0.1900	0.98	1.15
PIU5D12-8R2M	8.20±20%	0.2399	0.931	1.02
PIU5D12-100M	10±20%	0.2844	0.818	0.938
PIU5D12-120M	12±20%	0.3750	0.750	0.850
PIU5D12-150M	15±20%	0.4089	0.692	0.782
PIU5D12-220M	22±20%	0.6338	0.574	0.628
PIU5D12-330M	33±20%	0.9289	0.474	0.519
PIU5D12-470M	47±20%	1.37	0.391	0.428
PIU5D12-680M	68±20%	2.16	0.325	0.341
PIU5D12-820M	82±20%	2.36	0.297	0.326
PIU5D12-101M	100±20%	2.64	0.273	0.308
PIU5D12-151M	150±20%	3.96	0.220	0.251
PIU5D12-221M	220±20%	4.76	0.181	0.229
PIU5D12-331M	330±20%	7.25	0.148	0.186
PIU5D12-471M	470±20%	8.95	0.126	0.167
PIU5D12-681M	680±20%	11.30	0.104	0.149
PIU5D12-821M	820±20%	14.93	0.095	0.129
PIU5D12-102M	1000±20%	17.20	0.086	0.121

Note: Measurement frequency of Inductance value : at 100kHz

PART NUMBER	L (uH)	DCR (ΩTyp.)	Isat (A)	Irms (A)
PIU5D14-R58M	0.58±20%	0.0220	4.84	3.52
PIU5D14-R87M	0.87±20%	0.0243	3.96	3.20
PIU5D14-1R2M	1.2±20%	0.0344	3.35	2.70
PIU5D14-1R5M	1.5±20%	0.0390	2.91	2.53
PIU5D14-2R0M	2.0±20%	0.0445	2.56	2.37
PIU5D14-2R5M	2.5±20%	0.0595	2.29	2.05
PIU5D14-3R2M	3.2±20%	0.0663	2.08	1.94
PIU5D14-4R5M	4.5±20%	0.0935	1.74	1.64
PIU5D14-6R9M	6.9±20%	0.1363	1.41	1.35
PIU5D14-8R8M	8.8±20%	0.1913	1.25	1.14
PIU5D14-100M	10±20%	0.2058	1.18	1.10
PIU5D14-150M	15±20%	0.2609	0.969	0.98
PIU5D14-220M	22±20%	0.3853	0.793	0.806
PIU5D14-330M	33±20%	0.5852	0.651	0.654
PIU5D14-470M	47±20%	0.9055	0.538	0.525
PIU5D14-680M	68±20%	1.11	0.449	0.474
PIU5D14-820M	82±20%	1.50	0.407	0.408
PIU5D14-101M	100±20%	1.68	0.373	0.386
PIU5D14-151M	150±20%	2.52	0.301	0.315
PIU5D14-221M	220±20%	3.77	0.249	0.258
PIU5D14-331M	330±20%	5.92	0.203	0.206
PIU5D14-471M	470±20%	8.34	0.171	0.173
PIU5D14-681M	680±20%	10.3	0.142	0.156
PIU5D14-821M	820±20%	13.9	0.129	0.134
PIU5D14-102M	1000±20%	15.8	0.117	0.126

Note: Measurement frequency of Inductance value : at 100kHz

PART NUMBER	L (uH)	DCR (ΩTyp.)	Isat (A)	Irms (A)
PIU5D18-R47M	0.47±20%	0.0201	4.63	3.58
PIU5D18-R82M	0.82±20%	0.0247	3.60	3.24
PIU5D18-1R2M	1.2±20%	0.0294	2.95	2.97
PIU5D18-1R5M	1.5±20%	0.0345	2.49	2.73
PIU5D18-2R2M	2.2±20%	0.0398	2.16	2.55
PIU5D18-3R3M	3.3±20%	0.0605	1.71	2.07
PIU5D18-4R7M	4.7±20%	0.0824	1.54	1.77
PIU5D18-6R2M	6.2±20%	0.1000	1.30	1.61
PIU5D18-8R2M	8.2±20%	0.1351	1.12	1.38
PIU5D18-100M	10±20%	0.1584	0.982	1.28
PIU5D18-150M	15±20%	0.2278	0.831	1.06
PIU5D18-220M	22±20%	0.3366	0.689	0.876
PIU5D18-330M	33±20%	0.5057	0.568	0.715
PIU5D18-470M	47±20%	0.7732	0.470	0.578
PIU5D18-680M	68±20%	0.9798	0.390	0.514
PIU5D18-820M	82±20%	1.30	0.356	0.446
PIU5D18-101M	100±20%	1.47	0.321	0.419
PIU5D18-151M	150±20%	2.18	0.263	0.345
PIU5D18-221M	220±20%	2.95	0.217	0.296
PIU5D18-331M	330±20%	4.20	0.177	0.248
PIU5D18-471M	470±20%	6.39	0.148	0.201
PIU5D18-681M	680±20%	9.28	0.124	0.167
PIU5D18-821M	820±20%	12.35	0.113	0.145
PIU5D18-102M	1000±20%	14.01	0.102	0.136

Note: Measurement frequency of Inductance value : at 100kHz

PART NUMBER	L (uH)	DCR (ΩTyp.)	Isat (A)	Irms (A)
PIU5D20-R47M	0.47±20%	0.0200	4.00	3.59
PIU5D20-1R2M	1.2±20%	0.0275	2.55	3.07
PIU5D20-1R5M	1.5±20%	0.0312	2.15	2.88
PIU5D20-2R2M	2.2±20%	0.0429	1.87	2.45
PIU5D20-3R3M	3.3±20%	0.0547	1.47	2.17
PIU5D20-4R7M	4.7±20%	0.0612	1.33	2.05
PIU5D20-6R2M	6.2±20%	0.0720	1.12	1.89
PIU5D20-8R2M	8.2±20%	0.1000	0.966	1.61
PIU5D20-100M	10±20%	0.1100	1.000	1.53
PIU5D20-150M	15±20%	0.1655	0.718	1.25
PIU5D20-220M	22±20%	0.2053	0.596	1.12
PIU5D20-330M	33±20%	0.3100	0.491	0.913
PIU5D20-470M	47±20%	0.4650	0.406	0.745
PIU5D20-680M	68±20%	0.6947	0.337	0.610
PIU5D20-820M	82±20%	0.7785	0.308	0.576
PIU5D20-101M	100±20%	1.06	0.283	0.495
PIU5D20-151M	150±20%	1.37	0.228	0.435
PIU5D20-221M	220±20%	2.04	0.188	0.356
PIU5D20-331M	330±20%	2.99	0.155	0.294
PIU5D20-471M	470±20%	3.74	0.129	0.263
PIU5D20-681M	680±20%	5.56	0.107	0.216
PIU5D20-821M	820±20%	6.22	0.098	0.204
PIU5D20-102M	1000±20%	8.73	0.088	0.172

Note: Measurement frequency of Inductance value : at 100kHz

PART NUMBER	L (uH)	DCR (ΩTyp.)	Isat (A)	Irms (A)
PIU5D25-R47M	0.47±20%	0.0177	6.00	3.88
PIU5D25-R82M	0.82±20%	0.0208	4.67	3.58
PIU5D25-1R2M	1.2±20%	0.0240	3.81	3.33
PIU5D25-1R5M	1.5±20%	0.0274	3.23	3.12
PIU5D25-2R2M	2.2±20%	0.0311	2.80	2.93
PIU5D25-3R3M	3.3±20%	0.0384	2.21	2.64
PIU5D25-4R7M	4.7±20%	0.0467	1.83	2.39
PIU5D25-6R8M	6.8±20%	0.0556	1.56	2.19
PIU5D25-8R2M	8.2±20%	0.0724	1.45	1.92
PIU5D25-100M	10±20%	0.0824	1.27	1.80
PIU5D25-150M	15±20%	0.0956	1.08	1.67
PIU5D25-220M	22±20%	0.1478	0.857	1.34
PIU5D25-330M	33±20%	0.2149	0.711	1.11
PIU5D25-470M	47±20%	0.3156	0.592	0.919
PIU5D25-680M	68±20%	0.4850	0.482	0.741
PIU5D25-820M	82±20%	0.5242	0.441	0.713
PIU5D25-101M	100±20%	0.5937	0.398	0.670
PIU5D25-151M	150±20%	0.8723	0.328	0.553
PIU5D25-221M	220±20%	1.34	0.268	0.446
PIU5D25-331M	330±20%	2.07	0.219	0.359
PIU5D25-471M	470±20%	3.10	0.184	0.293
PIU5D25-681M	680±20%	3.88	0.154	0.262
PIU5D25-821M	820±20%	5.04	0.139	0.230
PIU5D25-102M	1000±20%	5.70	0.126	0.216

Note: Measurement frequency of Inductance value : at 100kHz

●SMT POWER INDUCTOR ENVIRONMENTAL SPECIFICATIONS

General

Items	Specifications
Shelf Storage conditions	Temperature range: 25±3℃; Humidity: <80% relative humidity. Recommended product should be used within six months from the time of delivery.

Environmental test

Test Items	Specifications	Test Conditions / Test Methods
High temperature Storage test	No case deformation or change in appearance. △ L/L≦10%	Temperature 85±2℃, Time: 48±2 hours, Tested after 1hour at room temperature.
Low temperature Storage test		Temperature -25±2℃, Time: 48±2 hours, Tested after 1hour at room temperature.
Humidity test		Temperature 40±2℃, 90~95% relative humidity Time: 96±2 hours Tested after 1hour at room temperature.
Thermal shock test		First is -25℃ 30minutes then 25℃ 10 minutes last 85℃ 30 minutes, as 1 cycle. Go through 5 cycles. Tested after 1 hour at room temperature.

Mechanical test

Test Items	Specifications	Test Conditions / Test Methods
Solderability test	Terminal area must have 90% minimum solder coverage.	Product with Lead-free terminal: Dip pads in flux then dip in solder pot at 245±5℃ for 3 seconds.
Resistance to Soldering Heat	No case deformation or change in appearance.	Flux should cover the whole of the sample before heating, then be preheated for about 2 minutes over temperature of 130~150℃. Immersing to 260±5℃ for 10 seconds.
Vibration test	No case deformation or change in appearance. △ L/L≦10%	Apply frequency 10~55Hz. 1.5mm amplitude in each of perpendicular direction for 2 hours.
Shock resistance		Drop down with 981m/s^2(100G) shock attitude upon a rubber block method shock testing machine, for 1 time. In each of three orientations.

The condition of reflow (recommendation):