

SPECIFICATION



ZenithTek

Brand

ZenithTek

Product Series Code

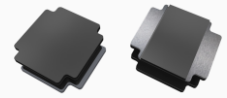
ZAD - Series

File Version

V3.1

Description

SMD Low Profile Magnetic Epoxy Inductor



Features

- High Rated Current.
- Low DC Resistance.
- A Series of Package Size and Wide Inductance Range.
- Halogen Free, Lead Free, RoHS and REACH Compliance.

Applications

- DC to DC Converter.
- Computing, Mobile, Networking.
- IoT, Gaming, Audio Devices.
- Industrial PC, Storage Devices.

Product Identification

ZAD - 3010 ME S - 100 M/N
 1 2 3 4 5 6

1.Product Code:

ZAD = ZenithTek Code.

4.Material Code:

S = Material.

2.Dimension Code:

3010 = 3.0 * 3.0 * 1.0 mm.

5.Inductance Code:

100 = 10μH.

3.Type Code:

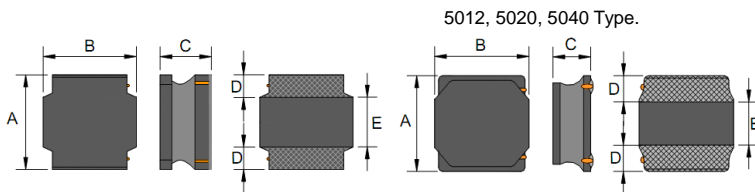
ME = Magnetic Epoxy Type.

6.Tolerance Code:

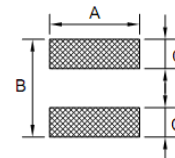
M = 20%.

N = 30%.

Dimension (Unit: mm)



Land Pattern (Unit: mm)



Type	A(±0.3)	B(±0.3)	C(Max.)	D(Ref.)	E(Ref.)
ZAD-3010	3.00	3.00	1.00	0.75	1.50
ZAD-3012	3.00	3.00	1.20	0.75	1.50
ZAD-3015	3.00	3.00	1.50	0.75	1.50
ZAD-4010	4.00	4.00	1.00	0.95	2.10
ZAD-4012	4.00	4.00	1.25	0.95	2.10
ZAD-4018	4.00	4.00	1.80	0.95	2.10
ZAD-4020	4.00	4.00	2.00	0.95	2.10
ZAD-4030	4.00	4.00	3.00	0.95	2.10
ZAD-5012	5.00	5.00	1.20	1.25	2.50
ZAD-5020	5.00	5.00	2.00	1.25	2.50
ZAD-5040	5.00	5.00	4.00	1.25	2.50
ZAD-6020	6.00	6.00	2.00	1.55	2.90
ZAD-6028	6.00	6.00	2.80	1.55	2.90
ZAD-6045	6.00	6.00	4.50	1.55	2.90
ZAD-8040	8.00	8.00	4.20	2.00	4.00

Type	A(Ref.)	B(Ref.)	C(Ref.)
ZAD-3010	2.70	3.10	0.80
ZAD-3012	2.70	3.10	0.80
ZAD-3015	2.70	3.10	0.80
ZAD-4010	3.70	4.10	1.10
ZAD-4012	3.70	4.10	1.10
ZAD-4018	3.70	4.10	1.10
ZAD-4020	3.70	4.10	1.10
ZAD-4030	3.70	4.10	1.10
ZAD-5012	4.20	5.10	1.40
ZAD-5020	4.20	5.10	1.40
ZAD-5040	4.20	5.10	1.40
ZAD-6020	5.70	6.20	1.70
ZAD-6028	5.70	6.20	1.70
ZAD-6045	5.70	6.20	1.70
ZAD-8040	7.50	8.20	2.20

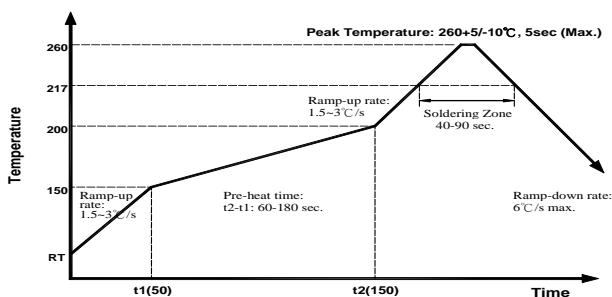
Product Structure



Schematic



Reflow Heat Endurance



Operating & Storage Conditions

Operating Temp. : -40°C~+125°C (including self-temp. rise)
 Storage Temp. : -40°C~+125°C (for PCBA)

Standard & Atmospheric Condition

Ambient Temp. : 20°C±15°C / Relative Humidity : 65±20%
 If there may be any doubt on the result, measurement shall be made within the following limits :
 Ambient Temp. : 20°C±2°C / Relative Humidity : 65±5%.

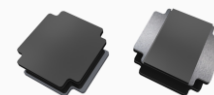
Test Equipment

LCR Meter : WK-3260B / DC Source : WK-3265B.
 Resistance Meter : HIOKI-RM3545.
 Caliper : Mitsutoyo 150mm.

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Brand ZenithTek
Product Series Code ZAD - Series
File Version V3.1
Description SMD Low Profile Magnetic Epoxy Inductor



Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-3010MES-1R0□	1.00	30	100	180	0.085	0.065	1.40	2.10	1.45	1.80
ZAD-3010MES-1R2□	1.20	30	100	137	0.085	0.065	1.25	1.70	1.45	1.80
ZAD-3010MES-1R5□	1.50	30	100	120	0.104	0.080	1.27	1.70	1.30	1.60
ZAD-3010MES-2R2□	2.20	30	100	100	0.143	0.110	1.15	1.50	1.09	1.40
ZAD-3010MES-2R7□	2.70	30	100	90	0.169	0.130	1.00	1.20	1.02	1.40
ZAD-3010MES-3R3□	3.30	30	100	74	0.189	0.145	0.97	1.20	0.96	1.20
ZAD-3010MES-3R6□	3.60	20	100	67	0.215	0.165	0.95	1.20	0.90	1.10
ZAD-3010MES-4R7□	4.70	20	100	59	0.293	0.225	0.75	1.05	0.77	1.10
ZAD-3010MES-5R6□	5.60	20	100	40	0.322	0.248	0.58	0.65	0.70	1.05
ZAD-3010MES-6R8□	6.80	20	100	42	0.397	0.305	0.55	0.72	0.66	0.96
ZAD-3010MES-8R2□	8.20	20	100	23	0.520	0.400	0.55	0.70	0.58	0.70
ZAD-3010MES-100□	10	20	100	39	0.520	0.400	0.55	0.75	0.58	0.70
ZAD-3010MES-120□	12	20	100	36	0.657	0.505	0.43	0.65	0.52	0.67
ZAD-3010MES-150□	15	20	100	30	0.793	0.610	0.42	0.57	0.47	0.57
ZAD-3010MES-220□	22	20	100	28	1.209	0.930	0.35	0.48	0.38	0.52
ZAD-3010MES-270□	27	20	100	25	1.404	1.080	0.30	0.45	0.35	0.50
ZAD-3010MES-330□	33	20	100	18	2.015	1.550	0.29	0.42	0.30	0.55
ZAD-3010MES-390□	39	20	100	18	2.275	1.750	0.28	0.38	0.28	0.53
ZAD-3010MES-430□	43	20	100	18	2.340	1.800	0.23	0.36	0.27	0.52
ZAD-3010MES-470□	47	20	100	18	2.535	1.950	0.22	0.35	0.26	0.52
ZAD-3010MES-510□	51	20	100	18	2.860	2.200	0.21	0.33	0.25	0.48
ZAD-3010MES-560□	56	20	100	16	3.016	2.320	0.21	0.28	0.24	0.35

Note 1: Tolerance Code: M= ±20%, N= ±30%.

Note 2: Isat: The DC current at which the inductance decreases approximately 30% from the actual value.

Note 3: Irms: The DC current at which the temperature rises approximately ΔT=40°C.

Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

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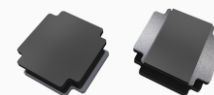
ZAD - Series

File Version

V3.1

Description

SMD Low Profile Magnetic Epoxy Inductor



Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-3012MES-R22□	0.22	30	100	321	0.022	0.017	5.30	6.00	3.00	3.30
ZAD-3012MES-R82□	0.82	30	100	180	0.039	0.030	2.05	2.80	2.47	3.00
ZAD-3012MES-1R0□	1.00	30	100	120	0.052	0.040	1.87	2.80	2.20	2.70
ZAD-3012MES-1R2□	1.20	30	100	120	0.059	0.045	2.22	2.50	2.01	2.20
ZAD-3012MES-1R5□	1.50	30	100	110	0.059	0.045	1.62	1.90	2.01	2.20
ZAD-3012MES-1R8□	1.80	30	100	90	0.082	0.063	1.30	1.90	1.65	1.80
ZAD-3012MES-2R2□	2.20	30	100	84	0.098	0.075	1.20	1.90	1.55	1.70
ZAD-3012MES-2R4□	2.40	30	100	100	0.088	0.068	1.15	1.50	1.60	1.70
ZAD-3012MES-2R7□	2.70	20	100	65	0.110	0.085	1.14	1.50	1.48	1.50
ZAD-3012MES-3R3□	3.30	20	100	64	0.130	0.100	1.05	1.50	1.36	1.40
ZAD-3012MES-3R6□	3.60	20	100	36	0.130	0.100	1.05	1.50	1.36	1.40
ZAD-3012MES-3R9□	3.90	20	100	61	0.189	0.145	1.00	1.30	1.24	1.30
ZAD-3012MES-4R7□	4.70	20	100	61	0.156	0.120	0.90	1.00	1.24	1.30
ZAD-3012MES-6R8□	6.80	20	100	61	0.247	0.190	0.75	0.90	0.98	1.10
ZAD-3012MES-100□	10	20	100	42	0.345	0.265	0.60	0.88	0.83	0.90
ZAD-3012MES-120□	12	20	100	32	0.449	0.345	0.48	0.67	0.73	0.84
ZAD-3012MES-150□	15	20	100	27	0.468	0.360	0.45	0.62	0.71	0.77
ZAD-3012MES-180□	18	20	100	25	0.709	0.545	0.43	0.59	0.58	0.65
ZAD-3012MES-220□	22	20	100	23	0.839	0.645	0.42	0.52	0.53	0.59
ZAD-3012MES-270□	27	20	100	21	1.131	0.870	0.35	0.48	0.47	0.51
ZAD-3012MES-330□	33	20	100	18	1.138	0.875	0.36	0.46	0.46	0.50
ZAD-3012MES-360□	36	20	100	18	1.235	0.950	0.34	0.44	0.44	0.48
ZAD-3012MES-390□	39	20	100	18	1.729	1.330	0.30	0.39	0.37	0.41
ZAD-3012MES-470□	47	20	100	14	1.885	1.450	0.27	0.35	0.35	0.40
ZAD-3012MES-560□	56	20	100	9	1.794	1.380	0.26	0.33	0.28	0.40
ZAD-3012MES-680□	68	20	100	7	2.171	1.670	0.24	0.29	0.33	0.37
ZAD-3012MES-820□	82	20	100	7	3.302	2.540	0.17	0.27	0.27	0.31
ZAD-3012MES-101□	100	20	100	5	3.718	2.860	0.21	0.23	0.25	0.29

Note 1: Tolerance Code: M= ±20%, N= ±30%.

Note 2: Isat (the Saturation current) is DC current at which the inductance drops approximate 30% from its value without current.

Note 3: Irms (the Temperature rise current value) is the DC current value having temperature increase up to 40°C from 20°C ambient.

Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

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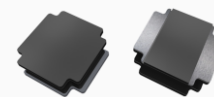
ZAD - Series

File Version

V3.1

Description

SMD Low Profile Magnetic Epoxy Inductor



Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-3015MES-R50□	0.50	30	100	162	0.039	0.030	3.90	4.20	2.60	2.80
ZAD-3015MES-1R0□	1.00	30	100	150	0.039	0.030	2.32	2.80	2.35	2.50
ZAD-3015MES-1R2□	1.20	30	100	110	0.052	0.040	2.21	3.10	1.95	2.30
ZAD-3015MES-1R5□	1.50	30	100	100	0.065	0.050	2.30	2.70	1.70	2.20
ZAD-3015MES-1R8□	1.80	30	100	92	0.065	0.050	1.75	2.20	1.70	2.20
ZAD-3015MES-2R2□	2.20	30	100	86	0.078	0.060	1.60	2.00	1.60	2.00
ZAD-3015MES-2R7□	2.70	30	100	64	0.098	0.075	1.52	1.90	1.43	1.90
ZAD-3015MES-3R3□	3.30	20	100	68	0.104	0.080	1.32	1.81	1.36	1.60
ZAD-3015MES-3R6□	3.60	20	100	59	0.137	0.105	1.28	1.60	1.20	1.50
ZAD-3015MES-3R9□	3.90	20	100	47	0.137	0.105	1.20	1.40	1.20	1.50
ZAD-3015MES-4R3□	4.30	20	100	53	0.150	0.115	1.20	1.40	1.14	1.30
ZAD-3015MES-4R7□	4.70	20	100	46	0.163	0.125	1.10	1.40	1.09	1.30
ZAD-3015MES-5R1□	5.10	20	100	49	0.173	0.133	1.00	1.20	1.05	1.20
ZAD-3015MES-6R2□	6.20	20	100	46	0.254	0.195	1.00	1.20	0.86	1.00
ZAD-3015MES-6R8□	6.80	20	100	39	0.260	0.200	0.85	1.10	0.85	1.10
ZAD-3015MES-100□	10	20	100	41	0.325	0.250	0.72	0.92	0.77	0.90
ZAD-3015MES-120□	12	20	100	32	0.416	0.320	0.70	0.90	0.68	0.89
ZAD-3015MES-150□	15	20	100	30	0.455	0.350	0.66	0.88	0.65	0.72
ZAD-3015MES-180□	18	20	100	23	0.559	0.430	0.56	0.72	0.59	0.72
ZAD-3015MES-220□	22	20	100	23	0.598	0.460	0.52	0.68	0.57	0.69
ZAD-3015MES-270□	27	20	100	22	0.949	0.730	0.48	0.56	0.45	0.56
ZAD-3015MES-330□	33	20	100	20	1.066	0.820	0.44	0.53	0.43	0.51
ZAD-3015MES-390□	39	20	100	14	1.294	0.995	0.41	0.55	0.39	0.44
ZAD-3015MES-430□	43	20	100	16	1.378	1.060	0.37	0.43	0.37	0.48
ZAD-3015MES-470□	47	20	100	14	1.625	1.250	0.35	0.43	0.35	0.44
ZAD-3015MES-560□	56	20	100	13	1.664	1.280	0.33	0.42	0.34	0.41
ZAD-3015MES-620□	62	20	100	13	2.093	1.610	0.30	0.40	0.30	0.41
ZAD-3015MES-680□	68	20	100	11	3.510	2.700	0.28	0.37	0.23	0.31
ZAD-3015MES-101□	100	20	100	7.2	4.043	3.110	0.23	0.25	0.21	0.25
ZAD-3015MES-151□	150	20	100	4.5	4.940	3.800	0.18	0.22	0.19	0.23

Note 1: Tolerance Code: M= ±20%, N= ±30%.

Note 2: Isat (the Saturation current) is DC current at which the inductance drops approximate 30% from its value without current.

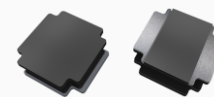
Note 3: Irms (the Temperature rise current value) is the DC current value having temperature increase up to 40°C from 20°C ambient.

Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

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Description SMD Low Profile Magnetic Epoxy Inductor



Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-4010MES-1R0□	1.00	30	100	104	0.067	0.056	2.00	2.30	1.90	2.40
ZAD-4010MES-1R5□	1.50	30	100	71	0.084	0.070	1.68	2.00	1.70	2.00
ZAD-4010MES-2R2□	2.20	20	100	52	0.102	0.085	1.20	1.50	1.50	2.00
ZAD-4010MES-3R3□	3.30	20	100	42	0.120	0.100	1.10	1.40	1.40	1.80
ZAD-4010MES-4R7□	4.70	20	100	30	0.168	0.140	0.95	1.10	1.20	1.50
ZAD-4010MES-6R8□	6.80	20	100	26	0.240	0.200	0.80	0.95	1.00	1.20
ZAD-4010MES-100□	10	20	100	19	0.360	0.300	0.62	0.75	0.75	1.00
ZAD-4010MES-150□	15	20	100	17	0.516	0.430	0.54	0.61	0.60	0.85
ZAD-4010MES-220□	22	20	100	11	0.684	0.570	0.45	0.52	0.50	0.75

Note 1: Tolerance Code: M= ±20%, N= ±30%.
Note 2: Isat (the Saturation current) is DC current at which the inductance drops approximate 30% from its value without current.
Note 3: Irms (the Temperature rise current value) is the DC current value having temperature increase up to 40°C from 20°C ambient.
Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

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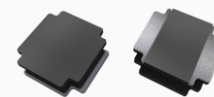
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Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-4012MES-R82□	0.82	30	100	150	0.065	0.050	3.02	3.30	1.65	2.50
ZAD-4012MES-1R0□	1.00	30	100	120	0.065	0.050	2.61	3.20	1.65	2.50
ZAD-4012MES-1R5□	1.50	30	100	90	0.085	0.065	2.10	2.70	1.46	2.20
ZAD-4012MES-1R8□	1.80	30	100	88	0.104	0.080	2.12	2.60	1.32	1.90
ZAD-4012MES-2R2□	2.20	30	100	74	0.104	0.080	1.76	2.30	1.32	1.90
ZAD-4012MES-2R7□	2.70	30	100	71	0.117	0.090	1.90	2.30	1.25	1.70
ZAD-4012MES-3R3□	3.30	30	100	60	0.143	0.110	1.72	2.10	1.12	1.60
ZAD-4012MES-3R6□	3.60	30	100	57	0.143	0.110	1.20	1.70	1.12	1.60
ZAD-4012MES-4R3□	4.30	30	100	54	0.182	0.140	1.58	1.70	1.00	1.50
ZAD-4012MES-4R7□	4.70	30	100	50	0.163	0.125	1.15	1.80	1.05	1.50
ZAD-4012MES-5R1□	5.10	30	100	50	0.201	0.155	1.55	1.60	0.95	1.50
ZAD-4012MES-5R6□	5.60	30	100	42	0.182	0.140	1.00	1.60	1.00	1.20
ZAD-4012MES-6R8□	6.80	20	100	40	0.257	0.198	0.85	1.40	0.84	1.20
ZAD-4012MES-100□	10	20	100	33	0.345	0.265	0.80	1.10	0.77	1.00
ZAD-4012MES-120□	12	20	100	32	0.377	0.290	0.66	1.00	0.70	0.95
ZAD-4012MES-150□	15	20	100	25	0.442	0.340	0.56	0.80	0.64	0.85
ZAD-4012MES-180□	18	20	100	23	0.611	0.470	0.55	0.75	0.55	0.80
ZAD-4012MES-220□	22	20	100	20	0.763	0.587	0.46	0.70	0.49	0.75
ZAD-4012MES-270□	27	20	100	18	0.936	0.720	0.50	0.70	0.45	0.60
ZAD-4012MES-330□	33	20	100	17	1.053	0.810	0.42	0.60	0.42	0.58
ZAD-4012MES-360□	36	20	100	14	1.170	0.900	0.40	0.50	0.40	0.56
ZAD-4012MES-390□	39	20	100	16	1.430	1.100	0.55	0.66	0.37	0.50
ZAD-4012MES-470□	47	20	100	12	1.430	1.100	0.35	0.50	0.37	0.50
ZAD-4012MES-560□	56	20	100	11	1.625	1.250	0.33	0.45	0.33	0.46
ZAD-4012MES-680□	68	20	100	11	2.535	1.950	0.38	0.45	0.27	0.45
ZAD-4012MES-820□	82	20	100	11	2.782	2.140	0.28	0.40	0.26	0.36
ZAD-4012MES-101□	100	20	100	9.4	2.873	2.210	0.25	0.30	0.25	0.35

Note 1: Tolerance Code: M= ±20%, N= ±30%.

Note 2: Isat (the Saturation current) is DC current at which the inductance drops approximate 30% from its value without current.

Note 3: Irms (the Temperature rise current value) is the DC current value having temperature increase up to 40°C from 20°C ambient.

Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

SPECIFICATION



ZenithTek

Brand

ZenithTek

Product Series Code

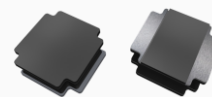
ZAD - Series

File Version

V3.1

Description

SMD Low Profile Magnetic Epoxy Inductor



Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-4018MES-R47□	0.47	30	100	155	0.018	0.014	4.30	5.20	4.00	4.50
ZAD-4018MES-R68□	0.68	30	100	128	0.026	0.020	4.90	5.60	3.30	3.80
ZAD-4018MES-1R0□	1.00	30	100	80	0.033	0.025	4.80	5.20	2.00	3.30
ZAD-4018MES-1R5□	1.50	30	100	65	0.039	0.030	3.35	4.00	1.80	3.20
ZAD-4018MES-1R8□	1.80	30	100	54	0.044	0.034	3.00	3.40	2.00	2.80
ZAD-4018MES-2R2□	2.20	20	100	52	0.059	0.045	2.70	3.20	1.65	2.60
ZAD-4018MES-3R3□	3.30	20	100	44	0.091	0.070	2.45	2.90	1.23	2.10
ZAD-4018MES-4R7□	4.70	20	100	34	0.117	0.090	1.70	2.20	1.20	1.80
ZAD-4018MES-6R8□	6.80	20	100	29	0.143	0.110	1.45	2.00	1.06	1.50
ZAD-4018MES-100□	10	20	100	24	0.234	0.180	1.30	1.60	0.84	1.20
ZAD-4018MES-150□	15	20	100	19	0.325	0.250	0.94	1.10	0.65	1.00
ZAD-4018MES-220□	22	20	100	16	0.468	0.360	0.80	0.88	0.59	0.85
ZAD-4018MES-330□	33	20	100	12	0.689	0.530	0.56	0.75	0.49	0.72
ZAD-4018MES-470□	47	20	100	10	0.845	0.650	0.57	0.70	0.42	0.65
ZAD-4018MES-680□	68	20	100	8.3	1.300	1.000	0.47	0.51	0.32	0.52
ZAD-4018MES-101□	100	20	100	6.5	2.275	1.750	0.40	0.44	0.25	0.41
ZAD-4018MES-151□	150	20	100	5.5	3.250	2.500	0.31	0.34	0.22	0.36
ZAD-4018MES-221□	220	20	100	4	5.200	4.000	0.27	0.30	0.17	0.27

Note 1: Tolerance Code: M= ±20%, N= ±30%.

Note 2: Isat (the Saturation current) is DC current at which the inductance drops approximate 30% from its value without current.

Note 3: Irms (the Temperature rise current value) is the DC current value having temperature increase up to 40°C from 20°C ambient.

Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

SPECIFICATION



ZenithTek

Brand

ZenithTek

Product Series Code

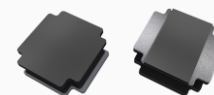
ZAD - Series

File Version

V3.1

Description

SMD Low Profile Magnetic Epoxy Inductor



Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-4020MES-R24□	0.24	20	100	283	0.014	0.011	10.5	12.5	4.50	5.20
ZAD-4020MES-R33□	0.33	30	100	223	0.016	0.013	7.50	8.50	3.30	4.90
ZAD-4020MES-R47□	0.47	30	100	160	0.029	0.022	7.00	7.50	3.30	3.70
ZAD-4020MES-R68□	0.68	30	100	120	0.036	0.028	6.40	6.60	2.80	3.30
ZAD-4020MES-1R0□	1.00	30	100	75	0.038	0.029	4.78	5.20	2.15	3.20
ZAD-4020MES-1R2□	1.20	30	100	72	0.038	0.029	5.10	5.60	2.15	3.20
ZAD-4020MES-1R5□	1.50	30	100	71	0.046	0.035	4.45	4.90	1.98	3.00
ZAD-4020MES-2R2□	2.20	30	100	49	0.052	0.040	3.40	3.70	1.85	2.80
ZAD-4020MES-3R3□	3.30	20	100	44	0.091	0.070	3.20	3.50	1.40	2.50
ZAD-4020MES-3R6□	3.60	20	100	49	0.072	0.055	2.80	3.00	1.54	2.50
ZAD-4020MES-4R7□	4.70	20	100	42	0.098	0.075	2.35	2.50	1.34	2.00
ZAD-4020MES-5R1□	5.10	20	100	42	0.111	0.085	2.30	2.50	1.27	1.80
ZAD-4020MES-5R6□	5.60	20	100	30	0.117	0.090	2.20	2.40	1.22	1.80
ZAD-4020MES-6R2□	6.20	20	100	36	0.150	0.115	2.15	2.30	1.08	1.60
ZAD-4020MES-6R8□	6.80	20	100	33	0.163	0.125	2.20	2.40	1.04	1.60
ZAD-4020MES-7R5□	7.50	20	100	30	0.150	0.115	1.85	2.00	1.08	1.50
ZAD-4020MES-8R2□	8.20	20	100	27	0.163	0.125	1.75	1.90	1.04	1.40
ZAD-4020MES-100□	10	20	100	26	0.215	0.165	1.60	1.70	0.90	1.20
ZAD-4020MES-120□	12	20	100	26	0.228	0.175	1.50	1.60	0.88	1.20
ZAD-4020MES-150□	15	20	100	24	0.299	0.230	1.35	1.50	0.77	1.10
ZAD-4020MES-220□	22	20	100	15	0.455	0.350	1.05	1.10	0.62	0.87
ZAD-4020MES-270□	27	20	100	14	0.709	0.545	1.02	1.10	0.50	0.70
ZAD-4020MES-330□	33	20	100	11	0.715	0.550	0.85	0.93	0.49	0.68
ZAD-4020MES-390□	39	20	100	11	0.845	0.650	0.82	0.90	0.46	0.64
ZAD-4020MES-430□	43	20	100	10	0.858	0.660	0.77	0.85	0.45	0.63
ZAD-4020MES-470□	47	20	100	10	0.923	0.710	0.74	0.81	0.44	0.61
ZAD-4020MES-510□	51	20	100	10	0.975	0.750	0.70	0.77	0.42	0.59
ZAD-4020MES-560□	56	20	100	10	1.040	0.800	0.66	0.72	0.41	0.57
ZAD-4020MES-620□	62	20	100	9.6	1.170	0.900	0.65	0.71	0.39	0.52
ZAD-4020MES-680□	68	20	100	7.7	1.380	1.060	0.61	0.67	0.36	0.50
ZAD-4020MES-750□	75	20	100	7.7	1.510	1.160	0.70	0.77	0.35	0.49
ZAD-4020MES-820□	82	20	100	7.2	1.520	1.170	0.50	0.55	0.34	0.47
ZAD-4020MES-101□	100	20	100	6.3	2.020	1.550	0.48	0.53	0.31	0.43

Note 1: Tolerance Code: M= ±20%, N= ±30%.

Note 2: Isat (the Saturation current) is DC current at which the inductance drops approximate 30% from its value without current.

Note 3: Irms (the Temperature rise current value) is the DC current value having temperature increase up to 40°C from 20°C ambient.

Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

SPECIFICATION



ZenithTek

Brand

ZenithTek

Product Series Code

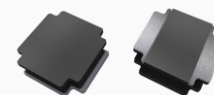
ZAD - Series

File Version

V3.1

Description

SMD Low Profile Magnetic Epoxy Inductor



Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-4030MES-R91□	0.91	30	100	100	0.017	0.013	6.25	6.80	4.15	4.70
ZAD-4030MES-1R0□	1.00	30	100	70	0.018	0.014	5.26	5.70	4.15	4.70
ZAD-4030MES-1R2□	1.20	30	100	80	0.020	0.015	5.80	6.30	3.82	4.20
ZAD-4030MES-1R5□	1.50	30	100	62	0.026	0.020	4.84	5.30	3.34	3.60
ZAD-4030MES-1R8□	1.80	30	100	60	0.033	0.025	4.50	5.00	3.20	3.30
ZAD-4030MES-2R2□	2.20	30	100	52	0.039	0.030	4.90	5.80	2.95	3.20
ZAD-4030MES-3R3□	3.30	20	100	38	0.052	0.040	3.30	3.60	2.40	2.60
ZAD-4030MES-3R9□	3.90	20	100	32	0.074	0.057	3.00	3.30	2.10	2.30
ZAD-4030MES-4R3□	4.30	20	100	37	0.072	0.055	2.95	3.20	2.10	2.30
ZAD-4030MES-4R7□	4.70	20	100	31	0.078	0.060	2.90	3.20	2.00	2.30
ZAD-4030MES-5R6□	5.60	20	100	30	0.085	0.065	2.60	2.80	1.95	2.10
ZAD-4030MES-6R8□	6.80	20	100	24	0.117	0.090	2.75	3.00	1.60	1.70
ZAD-4030MES-7R5□	7.50	20	100	26	0.111	0.085	2.20	2.40	1.65	1.80
ZAD-4030MES-8R2□	8.20	20	100	26	0.117	0.090	2.10	2.30	1.60	1.70
ZAD-4030MES-100□	10	20	100	21	0.130	0.100	1.95	2.40	1.50	1.60
ZAD-4030MES-120□	12	20	100	18	0.176	0.135	1.70	1.80	1.30	1.40
ZAD-4030MES-150□	15	20	100	16	0.247	0.190	1.65	1.80	1.11	1.20
ZAD-4030MES-180□	18	20	100	10	0.260	0.200	1.40	1.50	1.10	1.20
ZAD-4030MES-220□	22	20	100	10	0.293	0.225	1.30	1.40	1.00	1.20
ZAD-4030MES-330□	33	20	100	10	0.429	0.330	1.10	1.20	0.84	0.92
ZAD-4030MES-360□	36	20	100	9.8	0.436	0.335	1.05	1.10	0.83	0.91
ZAD-4030MES-390□	39	20	100	10	0.566	0.435	1.03	1.10	0.73	0.80
ZAD-4030MES-470□	47	20	100	8.4	0.579	0.445	0.95	1.00	0.72	0.80
ZAD-4030MES-510□	51	20	100	8.4	0.611	0.470	0.90	1.13	0.70	0.80
ZAD-4030MES-560□	56	20	100	8.4	0.722	0.555	0.85	0.94	0.65	0.71
ZAD-4030MES-620□	62	20	100	7	0.760	0.585	0.80	0.99	0.63	0.70
ZAD-4030MES-680□	68	20	100	7	1.128	0.868	0.72	0.80	0.52	0.57
ZAD-4030MES-750□	75	20	100	6.3	1.326	1.020	0.70	0.88	0.48	0.53
ZAD-4030MES-820□	82	20	100	5.6	1.378	1.060	0.66	0.72	0.47	0.52
ZAD-4030MES-910□	91	20	100	5.6	1.430	1.100	0.65	0.71	0.46	0.50
ZAD-4030MES-101□	100	20	100	5.6	1.495	1.150	0.60	0.73	0.45	0.49
ZAD-4030MES-121□	120	20	100	5.4	1.755	1.350	0.55	0.60	0.42	0.46

Note 1: Tolerance Code: M= ±20%, N= ±30%.

Note 2: Isat (the Saturation current) is DC current at which the inductance drops approximate 30% from its value without current.

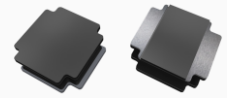
Note 3: Irms (the Temperature rise current value) is the DC current value having temperature increase up to 40°C from 20°C ambient.

Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

SPECIFICATION



Brand ZenithTek
Product Series Code ZAD - Series
File Version V3.1
Description SMD Low Profile Magnetic Epoxy Inductor



Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-5012MES-1R0□	1.00	30	100	103	0.068	0.057	4.40	4.70	2.00	2.40
ZAD-5012MES-1R5□	1.50	30	100	68	0.086	0.072	3.70	3.80	1.90	2.20
ZAD-5012MES-2R2□	2.20	30	100	50	0.108	0.090	3.10	3.20	1.70	2.00
ZAD-5012MES-3R3□	3.30	30	100	34	0.151	0.126	2.40	2.60	1.40	1.70
ZAD-5012MES-4R7□	4.70	30	100	31	0.197	0.164	2.20	2.30	1.30	1.50
ZAD-5012MES-6R8□	6.80	20	100	22	0.294	0.245	1.70	1.90	1.00	1.20
ZAD-5012MES-100□	10	20	100	17	0.413	0.344	1.40	1.50	0.85	1.00
ZAD-5012MES-150□	15	20	100	13	0.523	0.436	1.20	1.30	0.80	0.92
ZAD-5012MES-220□	22	20	100	16	0.858	0.780	0.88	0.98	0.60	0.68

Note 1: Tolerance Code: M= ±20%, N= ±30%.
Note 2: Isat (the Saturation current) is DC current at which the inductance drops approximate 30% from its value without current.
Note 3: Irms (the Temperature rise current value) is the DC current value having temperature increase up to 40°C from 20°C ambient.
Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

SPECIFICATION



ZenithTek

Brand

ZenithTek

Product Series Code

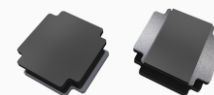
ZAD - Series

File Version

V3.1

Description

SMD Low Profile Magnetic Epoxy Inductor



Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-5020MES-R22□	0.22	30	100	280	0.011	0.009	9.00	12	5.30	6.00
ZAD-5020MES-R24□	0.24	30	100	248	0.011	0.009	8.00	10	5.30	6.00
ZAD-5020MES-R47□	0.47	30	100	160	0.017	0.013	6.15	6.70	4.60	5.00
ZAD-5020MES-R56□	0.56	30	100	137	0.022	0.017	8.50	9.60	3.80	4.20
ZAD-5020MES-R68□	0.68	20	100	120	0.022	0.017	5.50	6.00	4.00	4.40
ZAD-5020MES-R75□	0.75	30	100	117	0.022	0.017	5.50	6.00	4.00	4.40
ZAD-5020MES-1R0□	1.00	30	100	114	0.026	0.020	4.10	5.00	3.80	4.10
ZAD-5020MES-1R2□	1.20	30	100	83	0.029	0.022	4.50	4.90	3.55	3.90
ZAD-5020MES-1R5□	1.50	30	100	68	0.034	0.026	4.10	4.50	3.20	3.50
ZAD-5020MES-2R2□	2.20	30	100	57	0.042	0.032	3.20	4.00	2.90	3.10
ZAD-5020MES-2R7□	2.70	30	100	52	0.049	0.038	2.90	3.50	2.70	2.90
ZAD-5020MES-3R0□	3.00	30	100	49	0.049	0.038	2.55	2.80	2.70	2.90
ZAD-5020MES-3R3□	3.30	30	100	46	0.056	0.043	2.55	3.00	2.50	2.70
ZAD-5020MES-3R6□	3.60	30	100	43	0.056	0.043	2.80	3.00	2.50	2.70
ZAD-5020MES-3R9□	3.90	30	100	40	0.056	0.043	2.30	2.80	2.50	2.70
ZAD-5020MES-4R3□	4.30	20	100	37	0.074	0.057	2.50	3.00	2.20	2.40
ZAD-5020MES-4R7□	4.70	20	100	37	0.074	0.057	2.50	2.70	2.20	2.40
ZAD-5020MES-5R1□	5.10	20	100	32	0.083	0.064	2.25	2.60	2.05	2.20
ZAD-5020MES-5R6□	5.60	20	100	32	0.083	0.064	2.30	2.50	2.05	2.20
ZAD-5020MES-6R8□	6.80	20	100	30	0.108	0.083	2.05	2.20	1.80	1.90
ZAD-5020MES-7R5□	7.50	20	100	26	0.117	0.090	1.85	2.00	1.75	1.90
ZAD-5020MES-8R2□	8.20	20	100	26	0.127	0.098	1.85	2.00	1.65	1.80
ZAD-5020MES-9R1□	9.10	20	100	24	0.143	0.110	1.70	1.80	1.55	1.70
ZAD-5020MES-100□	10	20	100	24	0.143	0.110	1.70	1.80	1.55	1.70
ZAD-5020MES-120□	12	20	100	22	0.182	0.140	1.50	1.60	1.40	1.50
ZAD-5020MES-150□	15	20	100	20	0.215	0.165	1.35	1.40	1.25	1.30
ZAD-5020MES-180□	18	20	100	16	0.260	0.200	1.25	1.30	1.15	1.20
ZAD-5020MES-220□	22	20	100	14	0.294	0.226	1.15	1.20	1.10	1.20
ZAD-5020MES-330□	33	20	100	10	0.507	0.390	0.92	1.00	0.90	0.99
ZAD-5020MES-470□	47	20	100	7	0.680	0.523	0.77	0.84	0.77	0.84
ZAD-5020MES-560□	56	20	100	6	0.819	0.630	0.77	0.84	0.70	0.77
ZAD-5020MES-680□	68	20	100	6	0.962	0.740	0.65	0.70	0.64	0.70
ZAD-5020MES-820□	82	20	100	6	1.158	0.965	0.65	0.75	0.50	0.60
ZAD-5020MES-101□	100	20	100	6	1.430	1.100	0.53	0.58	0.53	0.58
ZAD-5020MES-121□	120	20	100	6	1.755	1.350	0.42	0.53	0.40	0.50
ZAD-5020MES-201□	200	20	100	4.5	2.600	2.000	0.30	0.33	0.40	0.45

Note 1: Tolerance Code: M= ±20%, N= ±30%.

Note 2: Isat (the Saturation current) is DC current at which the inductance drops approximate 30% from its value without current.

Note 3: I rms (the Temperature rise current value) is the DC current value having temperature increase up to 40°C from 20°C ambient.

Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

SPECIFICATION



ZenithTek

Brand

ZenithTek

Product Series Code

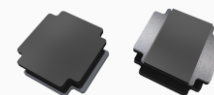
ZAD - Series

File Version

V3.1

Description

SMD Low Profile Magnetic Epoxy Inductor



Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-5040MES-1R0□	1.00	30	100	117	0.016	0.012	7.35	8.20	4.90	5.10
ZAD-5040MES-1R2□	1.20	30	100	110	0.021	0.016	6.50	7.10	4.15	4.30
ZAD-5040MES-1R5□	1.50	30	100	86	0.020	0.015	6.30	7.30	4.30	4.80
ZAD-5040MES-1R8□	1.80	20	100	55	0.021	0.016	5.50	6.40	4.15	4.30
ZAD-5040MES-2R2□	2.20	30	100	50	0.025	0.019	4.90	5.60	3.80	4.30
ZAD-5040MES-2R7□	2.70	30	100	37	0.029	0.022	4.30	5.10	3.60	4.10
ZAD-5040MES-3R0□	3.00	30	100	37	0.029	0.022	4.15	4.80	3.60	4.20
ZAD-5040MES-3R3□	3.30	30	100	32	0.031	0.024	3.95	4.60	3.40	3.90
ZAD-5040MES-3R9□	3.90	30	100	29	0.035	0.027	3.55	4.20	3.20	3.70
ZAD-5040MES-4R7□	4.70	30	100	28	0.039	0.030	3.50	3.90	3.00	3.30
ZAD-5040MES-5R6□	5.60	20	100	27	0.046	0.035	3.00	4.10	2.80	3.10
ZAD-5040MES-6R8□	6.80	20	100	21	0.056	0.043	2.90	3.50	2.50	2.80
ZAD-5040MES-8R2□	8.20	20	100	20	0.062	0.048	2.70	3.00	2.30	2.60
ZAD-5040MES-100□	10	20	100	18	0.083	0.064	2.35	2.90	2.10	2.40
ZAD-5040MES-150□	15	20	100	13	0.112	0.086	2.00	2.30	2.00	2.10
ZAD-5040MES-220□	22	20	100	11	0.168	0.129	1.60	1.90	1.50	1.60
ZAD-5040MES-330□	33	20	100	9	0.244	0.188	1.30	1.50	1.20	1.40
ZAD-5040MES-470□	47	20	100	7	0.354	0.272	1.10	1.30	1.00	1.10
ZAD-5040MES-680□	68	20	100	6	0.520	0.400	0.90	1.10	0.80	0.90
ZAD-5040MES-101□	100	20	100	5	0.728	0.560	0.75	0.90	0.70	0.80

Note 1: Tolerance Code: M= ±20%, N= ±30%.

Note 2: Isat (the Saturation current) is DC current at which the inductance drops approximate 30% from its value without current.

Note 3: Irms (the Temperature rise current value) is the DC current value having temperature increase up to 40°C from 20°C ambient.

Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

SPECIFICATION



ZenithTek

Brand

ZenithTek

Product Series Code

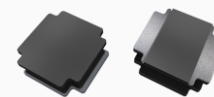
ZAD - Series

File Version

V3.1

Description

SMD Low Profile Magnetic Epoxy Inductor



Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-6020MES-R50□	0.50	30	100	120	0.018	0.014	4.50	6.00	4.00	5.00
ZAD-6020MES-R68□	0.68	30	100	115	0.022	0.017	6.55	7.80	3.80	4.80
ZAD-6020MES-R82□	0.82	30	100	110	0.022	0.017	5.30	6.30	3.80	4.80
ZAD-6020MES-1R0□	1.00	30	100	100	0.026	0.020	4.15	5.00	3.50	4.40
ZAD-6020MES-1R2□	1.20	30	100	88	0.029	0.022	5.90	7.00	3.20	4.00
ZAD-6020MES-1R5□	1.50	30	100	79	0.029	0.022	4.25	5.10	3.20	4.00
ZAD-6020MES-1R8□	1.80	30	100	68	0.036	0.028	4.85	5.80	2.75	3.50
ZAD-6020MES-2R0□	2.00	30	100	65	0.046	0.035	4.10	4.90	2.60	3.30
ZAD-6020MES-2R2□	2.20	30	100	61	0.036	0.028	3.75	4.50	2.75	3.50
ZAD-6020MES-2R7□	2.70	30	100	56	0.046	0.035	3.90	4.60	2.60	3.30
ZAD-6020MES-3R3□	3.30	30	100	51	0.046	0.035	3.15	3.70	2.60	3.30
ZAD-6020MES-3R9□	3.90	30	100	45	0.064	0.049	3.25	3.90	2.10	2.60
ZAD-6020MES-4R3□	4.30	30	100	44	0.064	0.049	2.70	3.20	2.10	2.60
ZAD-6020MES-4R7□	4.70	30	100	41	0.075	0.058	3.00	3.60	2.00	2.50
ZAD-6020MES-5R6□	5.60	30	100	36	0.075	0.058	2.40	2.90	1.90	2.40
ZAD-6020MES-6R2□	6.20	30	100	31	0.103	0.079	2.30	2.70	1.80	2.30
ZAD-6020MES-6R8□	6.80	30	100	31	0.103	0.079	2.20	2.60	1.80	2.30
ZAD-6020MES-8R2□	8.20	30	100	27	0.137	0.105	2.10	2.50	1.40	1.80
ZAD-6020MES-100□	10	20	100	27	0.137	0.105	1.75	2.10	1.40	1.80
ZAD-6020MES-120□	12	20	100	25	0.156	0.120	1.45	1.70	1.30	1.60
ZAD-6020MES-150□	15	20	100	21	0.189	0.145	1.20	1.40	1.20	1.50
ZAD-6020MES-180□	18	20	100	18	0.234	0.180	1.20	1.40	1.08	1.40
ZAD-6020MES-220□	22	20	100	16	0.265	0.204	1.05	1.20	1.00	1.30
ZAD-6020MES-330□	33	20	100	11	0.390	0.300	0.95	1.10	0.84	1.05
ZAD-6020MES-470□	47	20	100	10	0.559	0.430	0.70	0.90	0.80	0.90
ZAD-6020MES-331□	330	20	100	3	3.419	2.630	0.27	0.33	0.33	0.39

Note 1: Tolerance Code: M= ±20%, N= ±30%.

Note 2: Isat (the Saturation current) is DC current at which the inductance drops approximate 30% from its value without current.

Note 3: Irms (the Temperature rise current value) is the DC current value having temperature increase up to 40°C from 20°C ambient.

Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

SPECIFICATION



ZenithTek

Brand

ZenithTek

Product Series Code

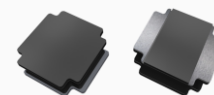
ZAD - Series

File Version

V3.1

Description

SMD Low Profile Magnetic Epoxy Inductor



Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-6028MES-R82□	0.82	30	100	97	0.016	0.012	6.50	9.00	5.20	6.00
ZAD-6028MES-1R0□	1.00	30	100	70	0.013	0.010	5.75	7.00	5.20	5.70
ZAD-6028MES-1R2□	1.20	30	100	69	0.017	0.013	6.40	7.50	4.58	5.00
ZAD-6028MES-1R5□	1.50	30	100	65	0.017	0.013	6.00	6.60	4.58	5.00
ZAD-6028MES-2R2□	2.20	30	100	48	0.026	0.020	5.10	5.60	3.75	4.10
ZAD-6028MES-2R7□	2.70	30	100	48	0.026	0.020	3.80	4.10	3.75	4.10
ZAD-6028MES-3R3□	3.30	30	100	41	0.033	0.025	4.15	4.50	3.48	3.80
ZAD-6028MES-4R7□	4.70	30	100	35	0.039	0.030	3.00	3.30	3.08	3.40
ZAD-6028MES-5R1□	5.10	30	100	32	0.056	0.043	3.20	3.50	2.60	2.80
ZAD-6028MES-6R2□	6.20	20	100	30	0.061	0.047	3.05	3.30	2.40	2.60
ZAD-6028MES-6R8□	6.80	20	100	27	0.061	0.047	2.60	3.00	2.40	2.60
ZAD-6028MES-8R2□	8.20	20	100	24	0.072	0.055	2.30	2.50	2.25	2.50
ZAD-6028MES-9R1□	9.10	20	100	24	0.096	0.074	2.55	2.80	2.15	2.40
ZAD-6028MES-100□	10	20	100	23	0.094	0.072	2.04	2.50	1.95	2.40
ZAD-6028MES-120□	12	20	100	18	0.104	0.080	1.80	2.00	1.85	2.00
ZAD-6028MES-150□	15	20	100	18	0.163	0.125	1.75	1.90	1.45	1.60
ZAD-6028MES-180□	18	20	100	15	0.156	0.120	1.52	1.80	1.45	1.60
ZAD-6028MES-220□	22	20	100	14	0.182	0.140	1.45	1.80	1.40	1.60
ZAD-6028MES-270□	27	20	100	13	0.202	0.155	1.50	1.60	1.32	1.40
ZAD-6028MES-330□	33	20	100	12	0.241	0.185	1.35	1.50	1.22	1.30
ZAD-6028MES-360□	36	20	100	11	0.280	0.215	1.25	1.40	1.13	1.20
ZAD-6028MES-390□	39	20	100	11	0.293	0.225	1.25	1.40	1.10	1.20
ZAD-6028MES-470□	47	20	100	9.5	0.410	0.315	1.15	1.30	1.06	1.10
ZAD-6028MES-560□	56	20	100	8.2	0.449	0.345	1.05	1.20	0.89	1.00
ZAD-6028MES-680□	68	20	100	7.7	0.468	0.360	0.80	0.95	0.86	0.95
ZAD-6028MES-750□	75	20	100	7.7	0.533	0.410	0.90	0.99	0.81	0.90
ZAD-6028MES-820□	82	20	100	7.7	0.650	0.500	0.80	0.88	0.70	0.77
ZAD-6028MES-101□	100	20	100	7.1	0.650	0.500	0.65	0.71	0.70	0.77
ZAD-6028MES-401□	400	20	100	2.8	2.808	2.160	0.30	0.33	0.40	0.45
ZAD-6028MES-102□	1000	20	100	1.5	7.540	5.800	0.18	0.22	0.23	0.26

Note 1: Tolerance Code: M= ±20%, N= ±30%.

Note 2: Isat (the Saturation current) is DC current at which the inductance drops approximate 30% from its value without current.

Note 3: I rms (the Temperature rise current value) is the DC current value having temperature increase up to 40°C from 20°C ambient.

Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

SPECIFICATION



ZenithTek

Brand

ZenithTek

Product Series Code

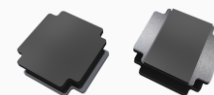
ZAD - Series

File Version

V3.1

Description

SMD Low Profile Magnetic Epoxy Inductor



Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-6045MES-R47□	0.47	30	100	155	0.008	0.006	15	16.5	6.50	6.60
ZAD-6045MES-R56□	0.56	30	100	142	0.008	0.006	15	14	6.50	7.50
ZAD-6045MES-R68□	0.68	30	100	99	0.008	0.006	11	12	5.70	6.50
ZAD-6045MES-R82□	0.82	30	100	140	0.010	0.008	10.35	11	5.90	6.50
ZAD-6045MES-1R0□	1.00	30	100	100	0.014	0.011	9.85	10	5.14	5.60
ZAD-6045MES-1R2□	1.20	30	100	100	0.013	0.010	8.35	9.10	5.40	5.90
ZAD-6045MES-1R3□	1.30	30	100	100	0.013	0.010	8.35	9.10	5.40	5.90
ZAD-6045MES-1R5□	1.50	30	100	65	0.016	0.012	8.80	9.70	4.95	5.40
ZAD-6045MES-1R8□	1.80	30	100	74	0.016	0.012	7.60	8.40	4.95	5.40
ZAD-6045MES-2R2□	2.20	30	100	52	0.018	0.014	6.75	7.40	4.60	5.00
ZAD-6045MES-2R3□	2.30	30	100	60	0.027	0.021	6.00	6.60	3.50	3.80
ZAD-6045MES-2R7□	2.70	30	100	38	0.020	0.015	5.75	6.30	4.30	4.70
ZAD-6045MES-3R0□	3.00	30	100	35	0.026	0.020	5.60	6.20	3.80	4.20
ZAD-6045MES-3R3□	3.30	30	100	32	0.027	0.021	5.90	6.20	3.70	4.00
ZAD-6045MES-3R6□	3.60	30	100	28	0.027	0.021	5.25	5.70	3.70	4.00
ZAD-6045MES-4R3□	4.30	20	100	23	0.030	0.023	4.45	4.90	3.50	3.80
ZAD-6045MES-4R5□	4.50	20	100	24	0.034	0.026	4.97	5.50	3.30	3.60
ZAD-6045MES-4R7□	4.70	20	100	24	0.034	0.026	4.97	5.50	3.30	3.60
ZAD-6045MES-5R1□	5.10	20	100	23	0.034	0.026	4.40	4.80	3.30	3.60
ZAD-6045MES-5R6□	5.60	20	100	23	0.038	0.029	4.15	4.60	3.15	3.40
ZAD-6045MES-6R2□	6.20	20	100	26	0.040	0.031	4.43	4.80	3.00	3.30
ZAD-6045MES-6R3□	6.30	20	100	26	0.040	0.031	4.43	4.70	3.00	3.30
ZAD-6045MES-6R8□	6.80	20	100	20	0.040	0.031	3.90	4.30	3.00	3.30
ZAD-6045MES-7R5□	7.50	20	100	18	0.044	0.034	3.50	3.80	2.90	3.20
ZAD-6045MES-8R2□	8.20	20	100	21	0.056	0.043	3.90	4.30	2.60	2.80
ZAD-6045MES-9R1□	9.10	20	100	17	0.056	0.043	3.35	3.70	2.60	2.80
ZAD-6045MES-100□	10	20	100	15	0.062	0.048	3.20	3.50	2.45	2.70
ZAD-6045MES-120□	12	20	100	13	0.075	0.058	2.80	3.00	2.20	2.40
ZAD-6045MES-150□	15	20	100	12	0.088	0.068	2.50	2.70	2.05	2.20
ZAD-6045MES-180□	18	20	100	10	0.105	0.081	2.20	2.40	1.85	2.00
ZAD-6045MES-220□	22	20	100	10	0.116	0.089	2.05	2.20	1.80	2.00
ZAD-6045MES-270□	27	20	100	9.2	0.133	0.102	1.90	2.10	1.65	1.80
ZAD-6045MES-300□	30	20	100	7.8	0.172	0.132	1.70	1.80	1.50	1.60
ZAD-6045MES-330□	33	20	100	7.8	0.178	0.137	1.65	1.80	1.45	1.60
ZAD-6045MES-360□	36	20	100	7.8	0.225	0.173	1.62	1.80	1.40	1.50
ZAD-6045MES-390□	39	20	100	7.8	0.234	0.180	1.50	1.60	1.25	1.40
ZAD-6045MES-430□	43	20	100	7.7	0.260	0.200	1.63	1.80	1.20	1.30
ZAD-6045MES-470□	47	20	100	6.4	0.260	0.200	1.40	1.50	1.20	1.30
ZAD-6045MES-510□	51	20	100	6.4	0.269	0.207	1.35	1.50	1.15	1.20

Note 1: Tolerance Code: M= ±20%, N= ±30%.

Note 2: Isat (the Saturation current) is DC current at which the inductance drops approximate 30% from its value without current.

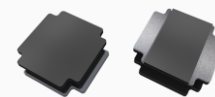
Note 3: Irms (the Temperature rise current value) is the DC current value having temperature increase up to 40°C from 20°C ambient.

Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

SPECIFICATION



Brand ZenithTek
Product Series Code ZAD - Series
File Version V3.1
Description SMD Low Profile Magnetic Epoxy Inductor



Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-6045MES-560□	56	20	100	6.4	0.287	0.221	1.30	1.40	1.10	1.20
ZAD-6045MES-620□	62	20	100	6.4	0.306	0.235	1.25	1.40	1.10	1.20
ZAD-6045MES-680□	68	20	100	6.4	0.376	0.289	1.20	1.30	1.00	1.10
ZAD-6045MES-750□	75	20	100	5	0.397	0.305	1.15	1.20	0.95	1.00
ZAD-6045MES-820□	82	20	100	4.9	0.443	0.341	1.05	1.10	0.90	0.99
ZAD-6045MES-910□	91	20	100	4.9	0.467	0.359	1.00	1.10	0.85	0.94
ZAD-6045MES-101□	100	20	100	4.2	0.563	0.433	0.95	1.00	0.80	0.88
ZAD-6045MES-121□	120	20	100	4.2	0.629	0.484	0.85	0.94	0.77	0.85
ZAD-6045MES-151□	150	20	100	4.2	0.754	0.580	0.80	0.88	0.70	0.77
ZAD-6045MES-221□	220	20	100	3.5	1.084	0.834	0.70	0.77	0.59	0.65
ZAD-6045MES-331□	330	20	100	2.8	1.651	1.270	0.57	0.63	0.57	0.63
ZAD-6045MES-471□	470	20	100	2	2.340	1.800	0.50	0.56	0.42	0.48
ZAD-6045MES-681□	680	20	100	1.7	3.250	2.500	0.42	0.46	0.33	0.38
ZAD-6045MES-102□	1000	20	100	1.4	5.850	4.500	0.30	0.35	0.30	0.35
ZAD-6045MES-152□	1500	20	100	0.8	8.450	6.500	0.24	0.27	0.21	0.24

Note 1: Tolerance Code: M= ±20%, N= ±30%.
Note 2: Isat (the Saturation current) is DC current at which the inductance drops approximate 30% from its value without current.
Note 3: Irms (the Temperature rise current value) is the DC current value having temperature increase up to 40°C from 20°C ambient.
Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

SPECIFICATION



ZenithTek

Brand

ZenithTek

Product Series Code

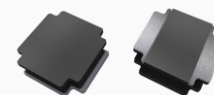
ZAD - Series

File Version

V3.1

Description

SMD Low Profile Magnetic Epoxy Inductor



Electrical Characteristic

Part Number	Inductance (μH)	Tolerance (%)	Test Frequency (KHz)/(1V)	SRF(MHz) (Min.)	DCR (Ω)/(Max.)	DCR (Ω)/(Typ.)	Saturation Current (Isat) (A)/(Max.)	Saturation Current (Isat) (A)/(Typ.)	Temperature Current (Irms) (A)/(Max.)	Temperature Current (Irms) (A)/(Typ.)
ZAD-8040MES-R82□	0.82	30	100	94	0.010	0.008	13.8	16	6.30	6.90
ZAD-8040MES-1R0□	1.00	30	100	89	0.010	0.008	9.85	14	6.30	6.90
ZAD-8040MES-1R2□	1.20	30	100	59	0.013	0.010	10	14	5.65	6.20
ZAD-8040MES-1R5□	1.50	30	100	67	0.013	0.010	8.15	11	5.65	6.20
ZAD-8040MES-2R0□	2.00	30	100	43	0.016	0.012	9.25	10	5.15	5.60
ZAD-8040MES-2R2□	2.20	30	100	41	0.016	0.012	7.10	8.00	5.15	5.60
ZAD-8040MES-3R0□	3.00	30	100	32	0.018	0.014	6.10	7.00	4.70	5.20
ZAD-8040MES-3R3□	3.30	30	100	27	0.022	0.017	6.50	7.00	4.40	4.80
ZAD-8040MES-3R6□	3.60	30	100	30	0.022	0.017	7.52	8.50	4.35	4.80
ZAD-8040MES-3R9□	3.90	30	100	26	0.022	0.017	5.75	6.50	4.35	4.80
ZAD-8040MES-4R7□	4.70	30	100	24	0.025	0.019	5.90	6.50	4.10	4.50
ZAD-8040MES-5R1□	5.10	30	100	22	0.025	0.019	4.70	5.40	4.05	4.40
ZAD-8040MES-5R6□	5.60	30	100	24	0.027	0.021	6.00	6.90	3.85	4.20
ZAD-8040MES-6R2□	6.20	30	100	20	0.027	0.021	4.45	5.10	3.85	4.20
ZAD-8040MES-6R8□	6.80	20	100	20	0.031	0.024	4.55	5.20	3.60	4.00
ZAD-8040MES-8R2□	8.20	20	100	17	0.034	0.026	4.20	4.80	3.45	3.80
ZAD-8040MES-100□	10	20	100	15	0.038	0.029	3.60	4.10	3.30	3.60
ZAD-8040MES-120□	12	20	100	13	0.053	0.041	3.50	4.00	2.80	3.00
ZAD-8040MES-150□	15	20	100	12	0.061	0.047	2.95	3.40	2.60	2.80
ZAD-8040MES-180□	18	20	100	11	0.069	0.053	2.70	3.10	2.40	2.60
ZAD-8040MES-220□	22	20	100	9.5	0.090	0.069	2.40	2.70	2.10	2.30
ZAD-8040MES-270□	27	20	100	9.2	0.101	0.078	2.15	2.50	2.00	2.20
ZAD-8040MES-330□	33	20	100	7.8	0.126	0.097	2.05	2.40	1.80	2.00
ZAD-8040MES-360□	36	20	100	7.8	0.133	0.102	2.00	2.30	1.75	1.90
ZAD-8040MES-390□	39	20	100	7.8	0.139	0.107	1.95	2.20	1.70	1.90
ZAD-8040MES-430□	43	20	100	7.8	0.147	0.113	1.90	2.20	1.65	1.80
ZAD-8040MES-470□	47	20	100	6.4	0.177	0.136	1.75	2.00	1.55	1.70
ZAD-8040MES-510□	51	20	100	6.4	0.185	0.142	1.70	1.90	1.50	1.60
ZAD-8040MES-560□	56	20	100	6.4	0.192	0.148	1.55	1.70	1.45	1.60
ZAD-8040MES-620□	62	20	100	6.4	0.237	0.182	1.50	1.60	1.30	1.40
ZAD-8040MES-680□	68	20	100	4.9	0.255	0.196	1.45	1.60	1.25	1.40
ZAD-8040MES-750□	75	20	100	4.9	0.274	0.211	1.35	1.50	1.20	1.30
ZAD-8040MES-820□	82	20	100	5.9	0.293	0.225	1.30	1.40	1.15	1.20
ZAD-8040MES-910□	91	20	100	4.9	0.354	0.272	1.20	1.30	1.05	1.10
ZAD-8040MES-101□	100	20	100	4.2	0.377	0.290	1.15	1.30	1.00	1.10
ZAD-8040MES-121□	120	20	100	3.5	0.434	0.334	1.05	1.10	0.95	1.00
ZAD-8040MES-151□	150	20	100	3.5	0.533	0.410	1.10	1.20	0.85	0.94
ZAD-8040MES-221□	220	20	100	3.5	0.779	0.599	0.85	0.94	0.80	0.88
ZAD-8040MES-331□	330	20	100	2.8	1.156	0.889	0.68	0.75	0.64	0.70
ZAD-8040MES-471□	470	20	100	2.1	1.625	1.250	0.60	0.70	0.50	0.60

Note 1: Tolerance Code: M= ±20%, N= ±30%.

Note 2: Isat (the Saturation current) is DC current at which the inductance drops approximate 30% from its value without current.

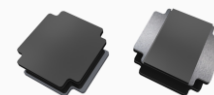
Note 3: Irms (the Temperature rise current value) is the DC current value having temperature increase up to 40°C from 20°C ambient.

Note 4: The Rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

SPECIFICATION



Brand ZenithTek
Product Series Code ZAD - Series
File Version V3.1
Description SMD Low Profile Magnetic Epoxy Inductor



Reliability Test

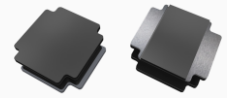
No.	Item	Specification	Test Method
1	Temperature Shock.	Appearance: No damage. Inductance: within $\pm 10\%$ of initial.	Temperature: $-40\pm 2^{\circ}\text{C} \sim +125\pm 2^{\circ}\text{C}$ Kept for 30 minutes. Transition time : 5 minutes. 100 Cycles.
2	Humidity Resistance.	Appearance: No damage. Inductance: within $\pm 10\%$ of initial.	Temperature: $40\pm 2^{\circ}\text{C}$. Relative Humidity: 90%. Duration: 500 +4/-0 hours.
3	High Temperature Resistance.	Appearance: No damage. Inductance: within $\pm 10\%$ of initial.	Temperature: $125\pm 2^{\circ}\text{C}$. Duration: 1000 +4/-0 hours.
4	Low Temperature Resistance.	Appearance: No damage. Inductance: within $\pm 10\%$ of initial.	Temperature: $-40\pm 2^{\circ}\text{C}$. Duration: 1000 +4/-0 hours.
5	Vibration test.	Appearance: No damage. Inductance: within $\pm 10\%$ of initial.	Oscillation Frequency: 10Hz to 55Hz to 10Hz in 60 seconds as a period. Total amplitude: 1.5mm. Testing Time: a period of 2 hours in each 3 mutually perpendicular directions (total of 6 hours).
6	Solderability Heat test.	Appearance: No damage. Inductance: within $\pm 10\%$ of initial.	Solder temperature: $260 +0/-5^{\circ}\text{C}$. Duration: 5 sec. Allowed reflow time: 2 times.
7	Solderability test.	90% or more of electrode area shall be coated by new solder.	Preheating: 160°C , 60sec. Solder temperature: $245\pm 5^{\circ}\text{C}$. Duration : 5 sec.
8	Flexure Strength.	No visible mechanical damage.	Flexure: 2mm. Pressurizing Speed: 0.5mm/sec. Keep time: 30 ± 1 sec.
9	Terminal Strength.	No visible mechanical damage.	Reflow 2 times. Force: 10N , Keep time: 5 sec , X,Y directs.

SPECIFICATION



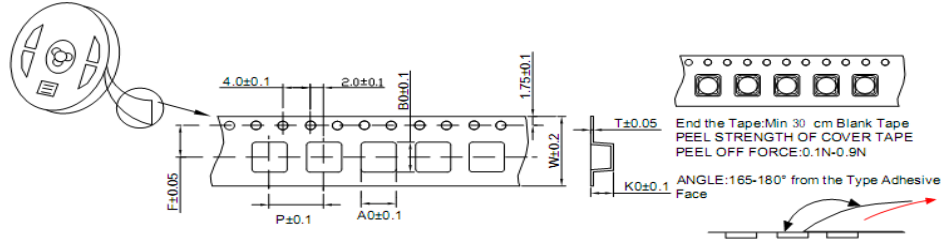
ZenithTek

Brand **ZenithTek**
 Product Series Code **ZAD - Series**
 File Version **V3.1**
 Description **SMD Low Profile Magnetic Epoxy Inductor**



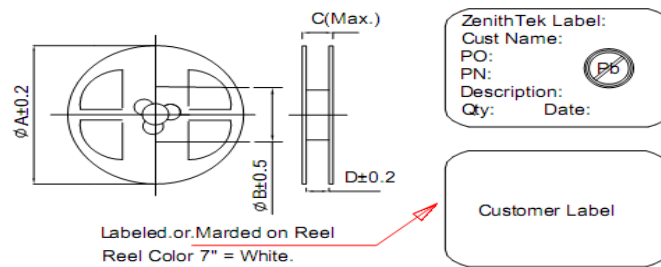
Package

Taping Dimension (mm)



Size(mm)	W	P	A0	B0	K0	T	F
ZAD-3010	8.00	4.00	3.30	3.30	1.40	0.25	3.50
ZAD-3012	8.00	4.00	3.30	3.30	1.60	0.25	3.50
ZAD-3015	8.00	4.00	3.30	3.30	1.90	0.25	3.50
ZAD-4010	12.00	8.00	4.30	4.30	1.40	0.35	5.50
ZAD-4012	12.00	8.00	4.30	4.30	1.40	0.35	5.50
ZAD-4018	12.00	8.00	4.30	4.30	2.10	0.35	5.50
ZAD-4020	12.00	8.00	4.30	4.30	2.40	0.40	5.50
ZAD-4030	12.00	8.00	4.30	4.30	3.20	0.40	5.50
ZAD-5012	12.00	8.00	5.30	5.30	1.40	0.35	5.50
ZAD-5020	12.00	8.00	5.40	5.40	2.20	0.35	5.50
ZAD-5040	12.00	8.00	5.30	5.30	4.20	0.40	5.50
ZAD-6020	16.00	8.00	6.30	6.30	2.50	0.40	7.50
ZAD-6028	16.00	8.00	6.40	6.40	3.30	0.40	7.50
ZAD-6045	16.00	8.00	6.40	6.40	4.70	0.40	7.50
ZAD-8040	16.00	12.00	8.35	8.35	4.40	0.40	7.50

Reel Dimension (mm)



Size(mm)	A	B	C	D	Reel/Size	Qty./Size
ZAD-3010	178	58	14.4	8.4	7"	2000 Pcs
ZAD-3012	178	58	14.4	8.4	7"	2000 Pcs
ZAD-3015	178	58	14.4	8.4	7"	2000 Pcs
ZAD-4010	330	100	18.4	12.4	13"	5000 pcs
ZAD-4012	330	100	18.4	12.4	13"	4500 pcs
ZAD-4018	330	100	18.4	12.4	13"	3000 pcs
ZAD-4020	330	100	18.4	12.4	13"	3000 pcs
ZAD-4030	330	100	18.4	12.4	13"	2000 pcs
ZAD-5012	330	100	18.4	12.4	13"	4500 pcs
ZAD-5020	330	100	18.4	12.4	13"	2500 pcs
ZAD-5040	330	100	18.4	12.4	13"	1500 pcs
ZAD-6020	330	100	22.4	16.4	13"	2500 pcs
ZAD-6028	330	100	22.4	16.4	13"	2000 pcs
ZAD-6045	330	100	22.4	16.4	13"	1500 pcs
ZAD-8040	330	100	22.4	16.4	13"	1000 pcs

Box Dimension (mm)

