

High Current Power Inductors AWIM13XX Series



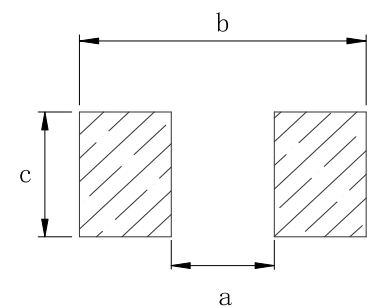
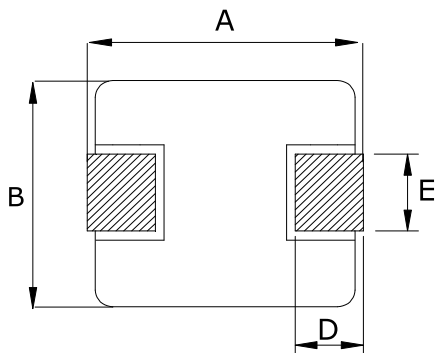
Product features

- DC-DC converter work frequency up to 1MHz
- Soft saturation. Low EMI.
- High current, low DCR, high efficiency.
- Current range from 1.5A to 90A
- Inductance range from 0.22 μ H to 150 μ H.
- High reliability.
- 100% Lead (Pb)-Free and RoHS compliant.
- Operating temperature -55~+125 $^{\circ}$ C (Including self - temperature rise)

Applications

- Note PC power system, server VRMs and EVRDs.
- DC/DC converter, Electric pumps, motor control and auxiliaries.
- Data networking and storage system.
- LED lighting/Battery management systems/Powertrain control module

Dimensions (mm) AWIM1335



Recommend Land Pattern

A	B	C	D	E	a typ	b typ	c typ
13.45 \pm 0.35	12.6 \pm 0.20	3.5 MAX	2.0 \pm 0.50	3.0/3.5 \pm 0.5	8.0	14.5	5.0

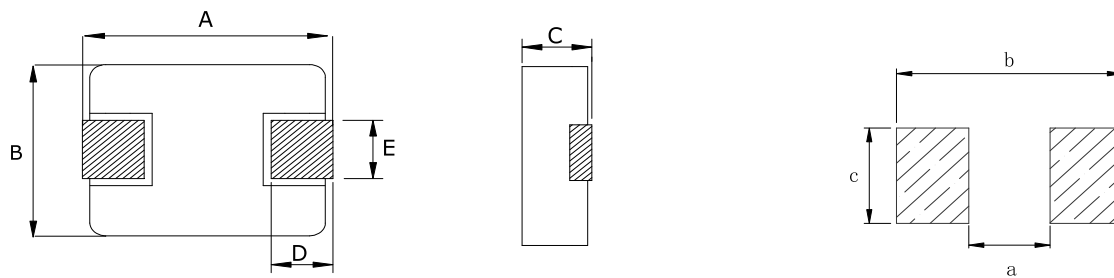
Specifications AWIM1335

Part Number	Inductance ² ±20% (μH)	I _{rms} ³ (A)	I _{sat} ⁴ (A)	DCR MAX (mΩ)
AWIM1335-R47MTF	0.47	32.00	36.00	1.50
AWIM1335-R68MTF	0.68	28.00	42.00	2.00
AWIM1335-1R0MTF	1.00	24.00	30.00	3.00
AWIM1335-1R2MTF	1.20	20.00	30.00	3.20
AWIM1335-1R5MTF	1.50	18.00	24.00	4.70
AWIM1335-2R2MTF	2.20	13.00	20.00	7.20
AWIM1335-3R3MTF	3.30	11.00	16.00	10.50
AWIM1335-4R7MTF	4.70	9.00	12.00	15.00
AWIM1335-100MTF	10.00	6.00	10.00	28.00

Notes:

1. All test data is reference to 25°C ambient.
2. Test Condition:100KHz,1.0Vrms.
3. I_{dc}: DC current (A) that will cause an approximate ΔT of 40°C
4. I_{sat} : DC current (A) that will cause L0 to drop approximately 30%
5. Operate between temperature range -55°C to +125°C
6. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component. PWB trace size and thickness, airflow and other cooling procession all affect the part temperature. Part temperature should be verified in the den application.

Dimensions (mm) AWIM1350



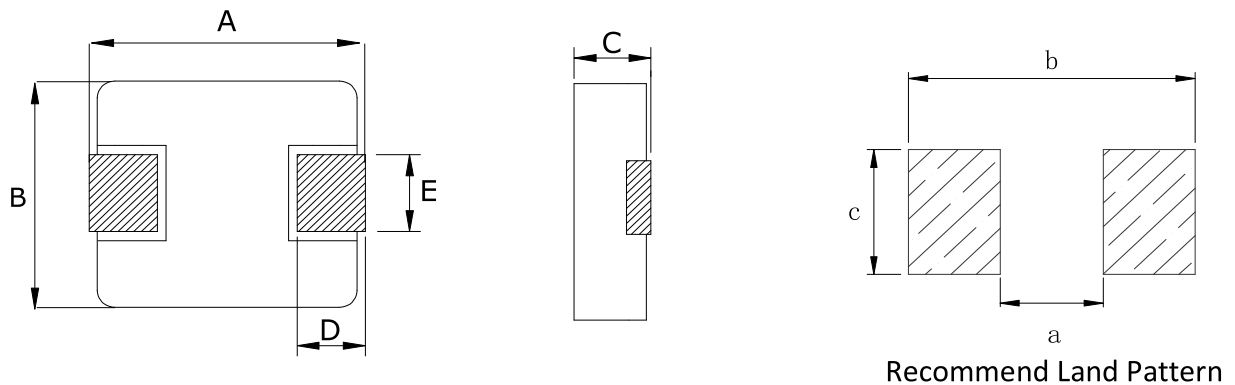
Recommend Land Pattern

A	B	C	D	E	a typ	b typ	c typ
13.45±0.35	12.6±0.20	5.0 MAX	2.0±0.50	3.0/3.5±0.5	8.0	14.5	5.0

Specifications

Part Number	Inductance ² ±20% (μH)	I _{rms} ³ (A)	I _{sat} ⁴ (A)	DCR MAX (mΩ)
AWIM1350-R22MTF	0.22	43.00	90.00	0.90
AWIM1350-R36MTF	0.36	41.00	70.00	1.00
AWIM1350-R47MTF	0.47	39.00	55.00	1.10
AWIM1350-R56MTF	0.56	36.00	50.00	1.50
AWIM1350-R68MTF	0.68	36.00	42.00	1.50
AWIM1350-R82MTF	0.82	30.00	42.00	1.67
AWIM1350-1R0MTF	1.00	26.00	40.00	2.20
AWIM1350-1R5MTF	1.50	23.00	32.00	3.20
AWIM1350-2R2MTF	2.20	15.00	26.00	5.00
AWIM1350-3R3MTF	3.30	13.00	22.00	9.00
AWIM1350-4R7MTF	4.70	12.00	17.00	11.00
AWIM1350-6R8MTF	6.80	10.00	14.00	18.00
AWIM1350-8R2MTF	8.20	9.00	13.00	19.00
AWIM1350-100MTF	10.00	8.00	12.00	24.00
AWIM1350-150MTF	15.00	5.00	8.00	32.00
AWIM1350-220MTF	22.00	4.50	7.00	52.00
AWIM1350-470MTF	47.00	3.00	5.00	110.00
AWIM1350-680MTF	68.00	2.50	4.50	135.00
AWIM1350-820MTF	82.00	2.00	3.50	180.00
AWIM1350-101MTF	100.00	1.80	3.50	180.00
AWIM1350-121MTF	120.00	1.50	3.50	300.00
AWIM1350-151MTF	150.00	1.50	3.00	310.00

Dimensions (mm) AWIM1360

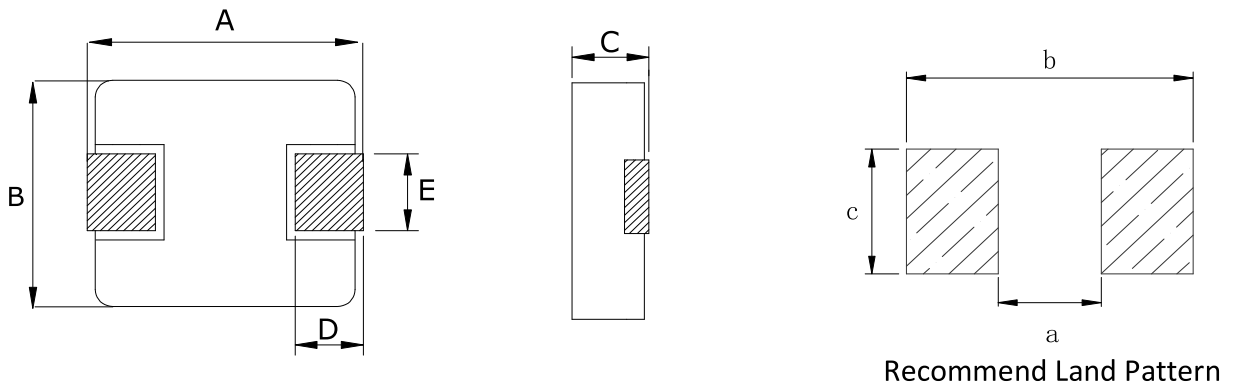


A	B	C	D	E	a typ	b typ	c typ
13.45±0.35	12.6±0.20	6.0 MAX	2.0±0.50	3.0/3.5±0.5	8.0	14.5	5.0

Specifications

Part Number	Inductance ² ±20% (μH)	I _{rms} ³ (A)	I _{sat} ⁴ (A)	DCR MAX (mΩ)
AWIM1360-R68MTF	0.68	33.00	55.00	1.40
AWIM1360-1R0MTF	1.00	30.00	35.00	1.70
AWIM1360-2R2MTF	2.20	20.00	25.00	3.00
AWIM1360-3R3MTF	3.30	16.00	22.00	5.00
AWIM1360-4R7MTF	4.70	13.00	18.00	8.00
AWIM1360-8R2MTF	8.20	10.50	14.00	16.00
AWIM1360-100MTF	10.00	10.00	13.00	20.70
AWIM1360-150MTF	15.00	6.00	9.00	29.00
AWIM1360-220MTF	22.00	5.00	7.50	38.00
AWIM1360-330MTF	33.00	4.00	7.00	60.00
AWIM1360-470MTF	47.00	3.50	5.50	85.00
AWIM1360-680MTF	68.00	3.00	5.00	140.00
AWIM1360-101MTF	100.00	2.50	3.50	200.00
AWIM-YT1260-121M-E50	120.00	2.00	3.20	235.00
AWIM-YT1260-151M-E50	150.00	1.50	2.70	350.00

Dimensions (mm) AWIM-YT1265



A	B	C	D	E	a typ	b typ	c typ
13.45±0.35	12.6±0.20	6.5 MAX	2.0±0.50	5.0±0.5	8.0	14.5	5.5

Specifications

Part Number	Inductance ² ±20% (μH)	I _{rms} ³ (A)	I _{sat} ⁴ (A)	DCR MAX (mΩ)
AWIM-YT1265-4R7M-E50	4.7	16	24	8.5
AWIM-YT1265-5R6M-E50	5.6	14	22.5	10.5
AWIM-YT1265-6R8M-E50	6.8	13	19	12
AWIM-YT1265-8R2M-E50	8.2	12	16	14
AWIM-YT1265-100M-E50	10	11	15	16.5
AWIM-YT1265-150M-E50	15	9.5	11	26
AWIM-YT1265-220M-E50	22	8	9	36
AWIM-YT1265-330M-E50	33	6.5	8	65
AWIM-YT1265-470M-E50	47	5.5	6.8	70
AWIM-YT1265-680M-E50	68	4.8	5.2	120
AWIM-YT1265-820M-E50	82	4	4.5	135
AWIM-YT1265-101M-E50	100	3.5	4	170