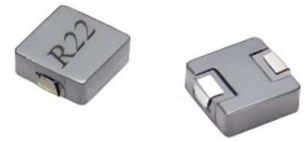


## High Current Power Inductors AWS-1770 Series



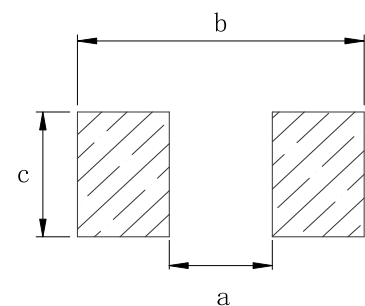
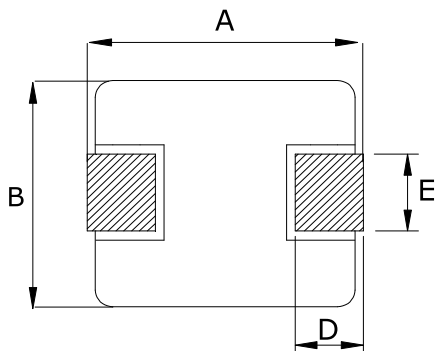
### Product features

- DC-DC converter work frequency up to 5MHz
- Soft saturation. Low EMI.
- High current, low DCR, high efficiency.
- Current range from 5.3A to 70A
- Inductance range from 1.0μH to 100μH.
- High reliability.
- 100% Lead (Pb)-Free and RoHS compliant.
- Operating temperature -55~+125°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) AWS-YTP1770



Recommend Land Pattern

A	B	C	D	E	a typ	b typ	c typ
17.5 ±0.5	17.0±0.3	7.0 MAX	2.5±0.50	12±0.3	11.2	18.2	12.8

## Specifications AWS-YTP1770

Part Number	Inductance <sup>2</sup> ±20% (μH)	I <sub>rms</sub> <sup>3</sup> (A)	I <sub>sat</sub> <sup>4</sup> (A)	DCR MAX (mΩ)
YTP1770-1R0M	1.0	52	70	2.0
YTP1770-1R5M	1.5	47	65	2.5
YTP1770-2R2M	2.2	43.5	62	2.7
YTP1770-3R3M	3.3	28	54	3.9
YTP1770-4R7M	4.7	25	50	5.5
YTP1770-6R8M	6.8	19	39	9.2
YTP1770-8R2M	8.2	18	31	10.8
YTP1770-100M	10	16.5	29	13
YTP1770-150M	15	12.5	27	20.5
YTP1770-220M	22	12	23	26.5
YTP1770-330M	33	10.7	20	44
YTP1770-390M	39	9.2	18	48
YTP1770-470M	47	8.7	16	55
YTP1770-560M	56	7.8	15	62
YTP1770-680M	68	7	13	80
YTP1770-101M	100	5.3	12	118

### Notes:

1. All test data is reference to 25°C ambient.
2. Test Condition:100KHz,1.0Vrms.
3. I<sub>dc</sub>: DC current (A) that will cause an approximate ΔT of 40°C
4. I<sub>sat</sub> : 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.