



SEP1510EX SERIES ~ High Current Power Inductors



PART NUMBERING SYSTEM

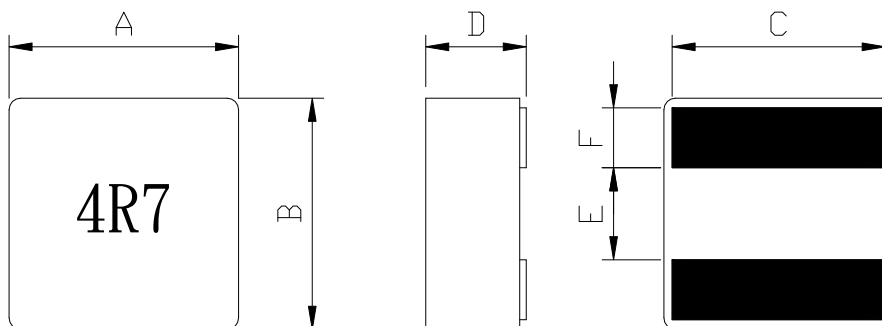
SEP	1510EX	—	4R7M	—	LF
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

FEATURES :

- Excellent current handling – up to 42 A; Exceptionally low DCR – only 3.85 mOhms
- Inductance range: 4.7 μ H – 22 μ H
- Magnetically shielded and low DC resistance and Suitable for large current .
- Excellent temperature stability for inductance and saturation with AEC-Q200 Grade 1 (–40°C to +125°C) .

SHAPES AND DIMENSIONS :

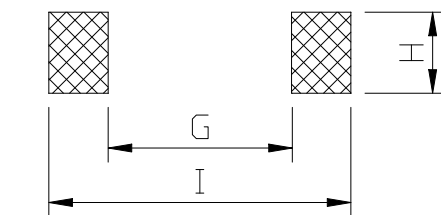
UNIT : mm



A=17.5±0.3 B=16.5±0.3 C=13.2±0.50 D=10.0 Max. E=7.4±0.3 F= 3.2±0.2

RECOMMENDED PATTERNS

UNIT : mm



H=15.0 G= 6.0 I = 15



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SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	Isat (A) Typ.(Max.)	Irms (A)Typ. 20°C/40°C(Rise)	DCR (m Ω) (Typ.)	DCR (m Ω) (Max.)
SEP1510EX-4R7M-LF	4.7 \pm 20%	43.0(39.0)	22.0(30.0)	3.40	3.80
SEP1510EX-5R6M-LF	5.6 \pm 20%	38.0(34.0)	21.0(28.0)	3.82	4.20
SEP1510EX-6R8M-LF	6.8 \pm 20%	36.0(31.0)	20.0(26.0)	4.18	4.60
SEP1510EX-8R2M-LF	8.2 \pm 20%	32.0(28.0)	19.0(25.0)	6.00	7.20
SEP1510EX-100M-LF	10 \pm 20%	29.0(26.0)	18.0(24.0)	7.10	8.60
SEP1510EX-150M-LF	15 \pm 20%	23.0(20.0)	14.0(18.0)	9.20	11.5
SEP1510EX-220M-LF	22 \pm 20%	20.0(18.0)	11.0(16.0)	13.2	15.8
SEP1510EX-330M-LF	33 \pm 20%	18.7(16.7)	9.00(13.0)	18.7	20.0

- Isat : DC current at which the inductance drops 30% (Max.) from its value without current.
- I rms : Average current for a 40°C temperature rise above 25°C ambient.
- Test Frequency at 100KHz / 0.1V
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating temperature range -40°C to +125°C , Electrical specifications at 25°C .
 (Operating temperature -40~+125°C (Including self - temperature rise).