

## SEP1508EX SERIES ~ High Current Power Inductors



### PART NUMBERING SYSTEM

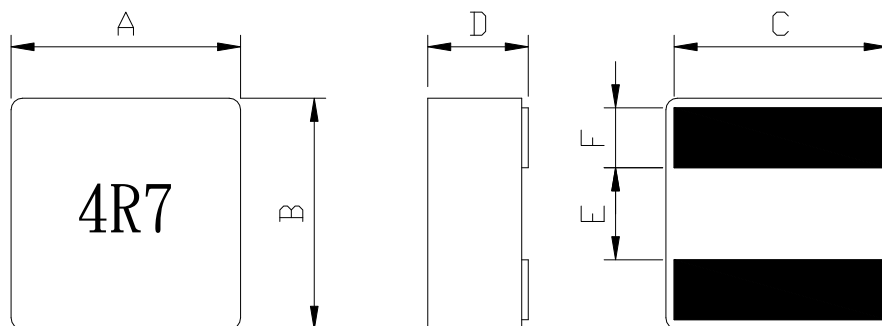
<b>SEP</b>	<b>1508EX</b>	—	<b>4R7M</b>	—	<b>LF</b>
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

### FEATURES :

- Excellent current handling – up to 111 A; Exceptionally low DCR – only 0.55 mOhms
- Inductance range: 0.40  $\mu$ H – 22  $\mu$ 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 :

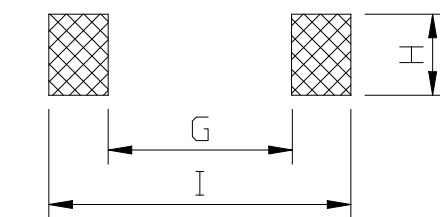
UNIT : mm



A=17.5±0.3 B=16.5±0.3 C=13.2±0.50 D=8.0 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 ( $\mu$ H)	Isat ( A ) Typ.(Max.)	Irms (A)Typ. 20°C/40°C(Rise)	DCR (m $\Omega$ ) (Typ.)	DCR (m $\Omega$ ) (Max.)
SEP1508EX-2R0M-LF	2.00 $\pm$ 20%	57.0(52.0)	29.5(40.0)	1.92	2.21
SEP1508EX-2R2M-LF	2.20 $\pm$ 20%	55.0(49.0)	28.0(37.0)	2.15	2.48
SEP1508EX-3R0M-LF	3.00 $\pm$ 20%	46.0(41.0)	26.0(34.5)	2.50	3.00
SEP1508EX-4R2M-LF	4.20 $\pm$ 20%	38.0(33.0)	20.5(27.0)	3.90	4.68
SEP1508EX-4R7M-LF	4.70 $\pm$ 20%	37.0(32.0)	20.0(26.5)	4.30	5.16
SEP1508EX-5R3M-LF	5.30 $\pm$ 20%	35.0(31.0)	19.5(26.0)	4.45	5.34
SEP1508EX-6R2M-LF	6.20 $\pm$ 20%	34.0(31.0)	17.0(23.0)	5.40	6.50
SEP1508EX-7R2M-LF	7.20 $\pm$ 20%	32.0(29.0)	15.0(21.0)	6.00	7.20
SEP1508EX-8R2M-LF	8.20 $\pm$ 20%	28.0(25.0)	13.0(19.0)	6.60	7.92
SEP1508EX-100M-LF	10.0 $\pm$ 20%	24.0(21.0)	11.0(16.0)	8.00	9.60
SEP1508EX-150M-LF	15.0 $\pm$ 20%	21.0(18.0)	10.0(13.0)	12.5	15.0
SEP1508EX-220M-LF	22.0 $\pm$ 20%	19.0(16.0)	9.00(12.0)	19.3	23.2

- I sat : 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).