



SEP0302EC-A SERIES ~ High Current Power Inductors



PART NUMBERING SYSTEM

(AEC-Q 200)

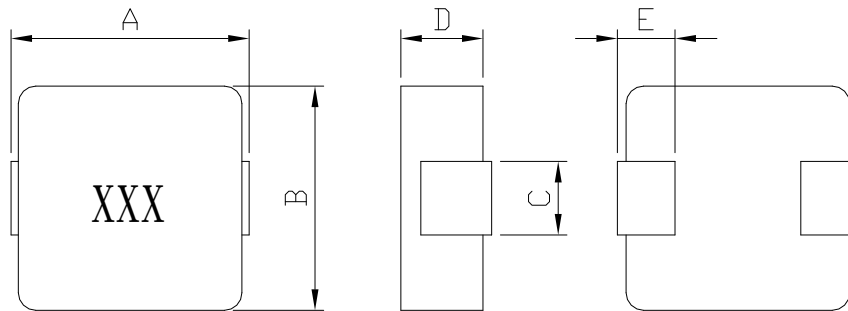
SEP	0302EC	—	1R5M	—	LF-A
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

FEATURES :

- Ultra-low profiles of 2.0 mm and 1212 case size – 3.0 mm by 3.6 mm footprint.
- High frequency operation – up to 1 MHz for DC/DC converters .
- Standard inductance values from 0.10 μ H through 10 μ H .
- Saturation current from 1.6 A to 14.0 A
- Large current handling capability .

SHAPES AND DIMENSIONS :

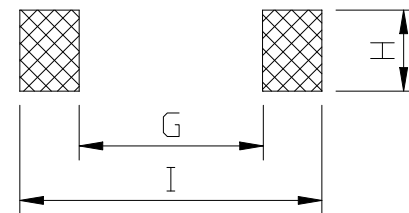
UNIT : mm



A=3.5±0.2 B=3.2±0.2 C=1.2±0.2 D=1.8±0.2 E=0.7±0.2

RECOMMENDED PATTERNS

UNIT : mm



H=1.4 G= 1.2 I = 4.2

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SPECIFICATION TABLE

(AEC-Q 200)

PART NUMBER	INDUCTANCE (μ H)	Isat (A) (Typ.)	Irms (A) (Typ.)	DCR (m Ω) (Typ.)	DCR (m Ω) (Max.)
SEP0302EC-R10M-LF-A	0.10 \pm 20%	14	10.5	6.6	9.0
SEP0302EC-R22M-LF-A	0.22 \pm 20%	11.2	9.0	11	14
SEP0302EC-R33M-LF-A	0.33 \pm 20%	10	8.0	17	21
SEP0302EC-R47M-LF-A	0.47 \pm 20%	9.0	7.0	19.7	23
SEP0302EC-R60M-LF-A	0.60 \pm 20%	7.5	6.0	24	28
SEP0302EC-R68M-LF-A	0.68 \pm 20%	7.0	5.5	25.5	29
SEP0302EC-R82M-LF-A	0.82 \pm 20%	6.0	4.8	27	32
SEP0302EC-1R0M-LF-A	1.00 \pm 20%	5.0	4.0	32	38
SEP0302EC-1R2M-LF-A	1.20 \pm 20%	4.5	3.9	39	47
SEP0302EC-1R5M-LF-A	1.50 \pm 20%	4.0	3.8	42	50
SEP0302EC-2R2M-LF-A	2.20 \pm 20%	3.7	3.5	65	75
SEP0302EC-3R3M-LF-A	3.30 \pm 20%	3.5	3.0	125	145
SEP0302EC-4R7M-LF-A	4.70 \pm 20%	3.0	2.6	172	200
SEP0302EC-5R6M-LF-A	5.60 \pm 20%	2.6	2.2	205	238
SEP0302EC-6R8M-LF-A	6.80 \pm 20%	2.2	1.9	260	300
SEP0302EC-8R2M-LF-A	8.20 \pm 20%	1.9	1.6	340	390
SEP0302EC-100M-LF-A	10.0 \pm 20%	1.6	1.4	366	422

- Isat : DC current at which the inductance drops 30% (typ) from its value without current.
- Irms : Average current for a 40°C temperature rise above 25°C ambient.
- Test Frequency at 100KHz / 1V
- Operating temperature range -55°C to +125°C , Electrical specifications at 25°C.