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SEP5030EX SERIES ~ High Current Power Inductors



PART NUMBERING SYSTEM

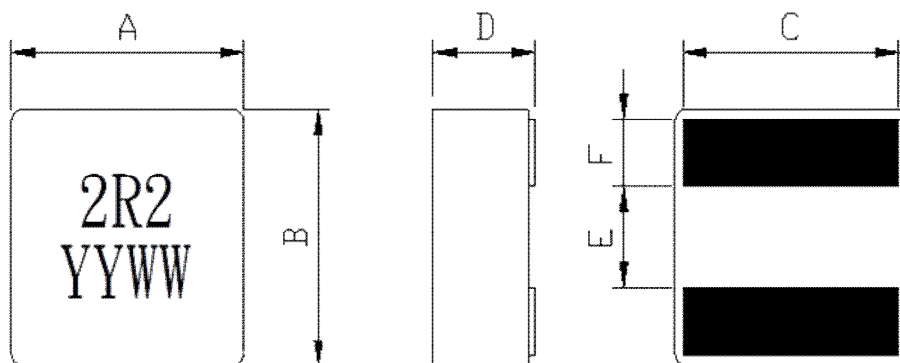
SEP	5030EX	—	2R2M	—	LF
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

FEATURES :

- Low profile (3.1mm max. height) and 5.75 mm max. square.
- Excellent current handling – up to 31 A; Exceptionally low DCR – only 2.15 mOhms
- Inductance rage: 0.16 μ H – 22 μ H
- Magnetically shielded and low DC resistance and Suitable for large current .
- Excellent temperature stability for inductance and saturation .

SHAPES AND DIMENSIONS :

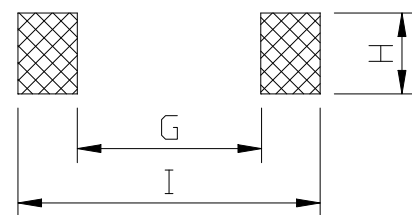
UNIT : mm



A=5.5 $\pm$ 0.2 B=5.3 $\pm$ 0.2 C=4.25 $\pm$ 0.3 D=2.9 $\pm$ 0.2 E=2.3 $\pm$ 0.25 F= 1.1 $\pm$ 0.2

RECOMMENDED PATTERNS

UNIT : mm



H=4.7 G= 2.0 I = 4.5



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SEP5030EX SERIES ~ High Current Power Inductors



SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	Isat (A) (Typ.)	Irms (A) (Typ.)	DCR (m Ω) (Typ.)	DCR (m Ω) (Max.)
SEP5030EX-R16M-LF	0.16 $\pm$ 20%	31.0	14.2	2.15	2.36
SEP5030EX-R33M-LF	0.33 $\pm$ 20%	26.0	13.8	3.20	3.52
SEP5030EX-R60M-LF	0.60 $\pm$ 20%	19.8	13.6	4.11	4.52
SEP5030EX-R80M-LF	0.80 $\pm$ 20%	18.5	10.0	5.14	5.65
SEP5030EX-1R0M-LF	1.0 $\pm$ 20%	14.0	8.7	8.50	9.40
SEP5030EX-2R2M-LF	2.2 $\pm$ 20%	9.2	7.2	13.2	14.5
SEP5030EX-3R3M-LF	3.3 $\pm$ 20%	8.7	5.9	21.2	23.3
SEP5030EX-4R7M-LF	4.7 $\pm$ 20%	6.7	4.3	36.0	40.0

- 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 / 0.1V
- Operating temperature range -40°C to +125°C , Electrical specifications at 25°C .
- Reel Qty 2,000pcs



SEP6030EX SERIES ~ High Current Power Inductors



PART NUMBERING SYSTEM

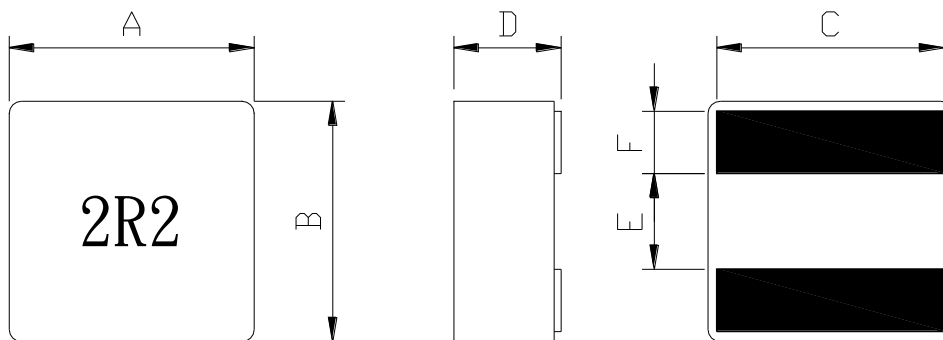
SEP	6030EX	—	2R2M	—	LF
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

FEATURES :

- Excellent current handling – up to 39 A; Exceptionally low DCR – only 1.45 mOhms
- Inductance range: 0.18 μ H – 3.30 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 :

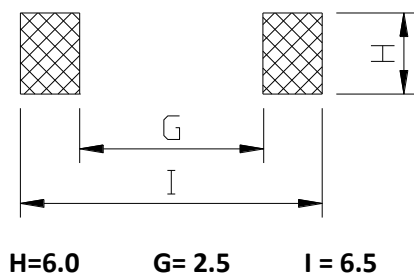
UNIT : mm



A=6.65 $\pm$ 0.2 B=6.45 $\pm$ 0.2 C=4.9 $\pm$ 0.4 D=3.3 $\pm$ 0.3 E=2.85 $\pm$ 0.25 F= 1.3 $\pm$ 0.2

RECOMMENDED PATTERNS

UNIT : mm



H=6.0 G= 2.5 I = 6.5



SEP6030EX SERIES ~ High Current Power Inductors



SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	Isat (A) (Max.)	Irms (A) (Max.)	DCR (m Ω) (Typ.)	DCR (m Ω) (Max.)
SEP6030EX-R18M-LF	0.18 $\pm$ 20%	39.0	32.0	1.32	1.45
SEP6030EX-R33M-LF	0.33 $\pm$ 20%	30.0	25.0	2.10	2.31
SEP6030EX-R56M-LF	0.56 $\pm$ 20%	29.0	22.0	2.90	3.19
SEP6030EX-1R2M-LF	1.2 $\pm$ 20%	22.0	16.0	6.40	7.04
SEP6030EX-1R8M-LF	1.8 $\pm$ 20%	18.2	14.0	9.80	10.78
SEP6030EX-2R2M-LF	2.2 $\pm$ 20%	15.9	10.0	10.50	11.55
SEP6030EX-3R3M-LF	3.3 $\pm$ 20%	12.2	8.00	19.20	21.12

- Isat : DC current at which the inductance drops 30% (Max.) from its value without current.
- Irms : Average current for a 40°C temperature rise above 25°C ambient.
- Test Frequency at 100KHz / 1.0V
- Operating temperature range -40°C to +125°C , Electrical specifications at 25°C.



SEP6060EX SERIES ~ High Current Power Inductors



PART NUMBERING SYSTEM

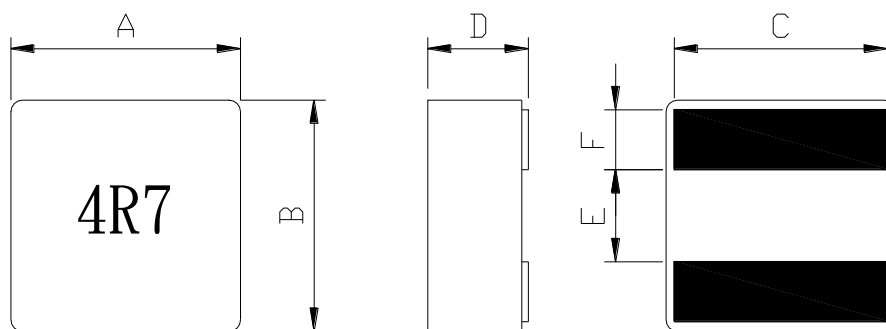
SEP	6060EX	—	4R7M	—	LF
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

FEATURES :

- Low profile (6.1mm max. height) and 6.65 mm max. square.
- Excellent current handling – up to 10.5 A; Exceptionally low DCR – only 14.3 mOhms
- Inductance rage: 4.7 μ H – 15 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 :

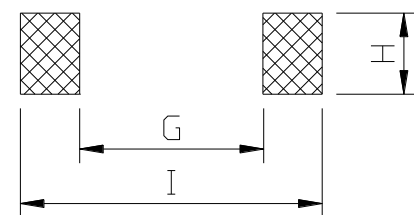
UNIT : mm



A=6.65±0.2 B=6.45±0.2 C=4.9±0.4 D=5.8±0.3 E=2.75±0.25 F= 1.3±0.2

RECOMMENDED PATTERNS

UNIT : mm



H=6.0 G= 2.5 I = 6.5



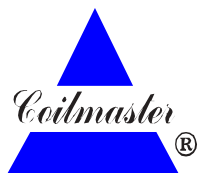
SEP6060EX SERIES ~ High Current Power Inductors



SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	Isat (A) (Max.)	Irms (A) (Max.)	DCR (m Ω) (Typ.)	DCR (m Ω) (Max.)
SEP6060EX-4R7M-LF	4.7 $\pm$ 20%	10.5	11.0	13.00	14.30
SEP6060EX-5R6M-LF	5.6 $\pm$ 20%	10.0	10.0	15.00	16.50
SEP6060EX-6R8M-LF	6.8 $\pm$ 20%	9.20	9.00	17.60	19.36
SEP6060EX-8R2M-LF	8.2 $\pm$ 20%	8.40	8.00	23.00	25.30
SEP6060EX-100M-LF	10 $\pm$ 20%	7.60	7.00	26.50	29.15
SEP6060EX-150M-LF	15 $\pm$ 20%	5.80	6.00	39.00	43.00

- Isat : DC current at which the inductance drops 30% (Max.) from its value without current.
- Irms : Average current for a 40°C temperature rise above 25°C ambient.
- Test Frequency at 100KHz / 1.0V
- Operating temperature range -40°C to +125°C , Electrical specifications at 25°C .



SEP8080EX SERIES ~ High Current Power Inductors



PART NUMBERING SYSTEM

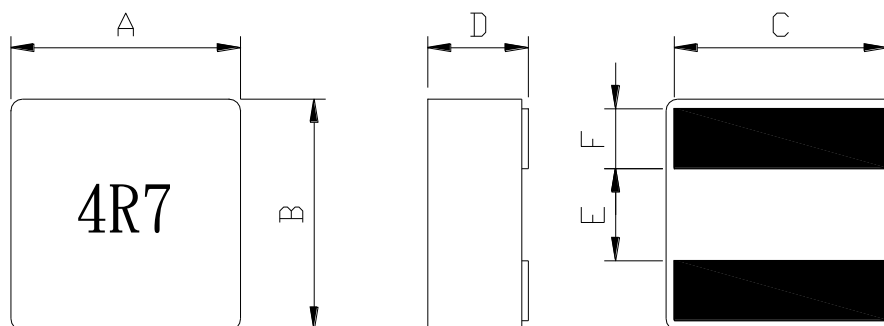
SEP	8080EX	—	4R7M	—	LF
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

FEATURES :

- Excellent current handling – up to 38 A; Exceptionally low DCR – only 1.65 mOhms
- Inductance range: 0.68 μ H – 10 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 :

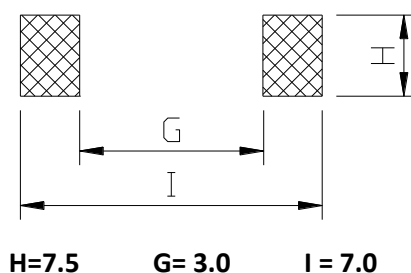
UNIT : mm



A=8.8 $\pm$ 0.2 B=8.3 $\pm$ 0.2 C=6.5 $\pm$ 0.3 D=7.8 $\pm$ 0.2 E=3.6 $\pm$ 0.4 F= 1.40 $\pm$ 0.2

RECOMMENDED PATTERNS

UNIT : mm



H=7.5 G= 3.0 I = 7.0



SEP8080EX SERIES ~ High Current Power Inductors



SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	I _{sat} (A) (Max.)	I _{rms} (A) (Max.)	DCR (m Ω) (Typ.)	DCR (m Ω) (Max.)
SEP8080EX-R68M-LF	0.68 $\pm$ 20%	38.0	37.0	1.38	1.65
SEP8080EX-1R0M-LF	1.0 $\pm$ 20%	31.0	34.0	2.10	2.30
SEP8080EX-2R2M-LF	2.2 $\pm$ 20%	24.0	21.0	3.70.	4.10.
SEP8080EX-4R7M-LF	4.7 $\pm$ 20%	17.4	17.4	8.65	9.50
SEP8080EX-6R8M-LF	6.8 $\pm$ 20%	14.0	11.0	13.5	14.9
SEP8080EX-100M-LF	10 $\pm$ 20%	11.0	9.0	20.0	22.0

- 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 / 1.0V
- Operating temperature range -40°C to +125°C , Electrical specifications at 25°C.