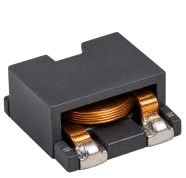
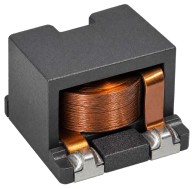
Shielded Power Inductors

Shielded Power Inductors - SEP1052 /SAC1408/1410/1412 Series





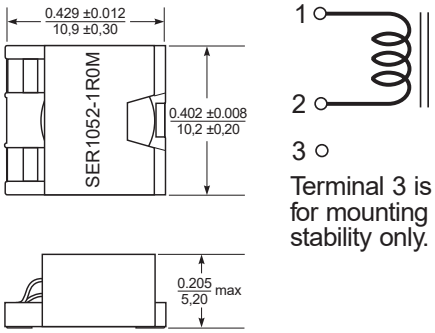
Features

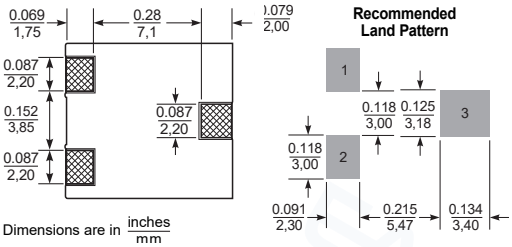
- Shielded ferrite; low DCR
- SEP1052: 5.2 mm maximum height
- SEP1400: flat-wire construction
- SEP1400: Isat up to 105.9 A [2]

Applications

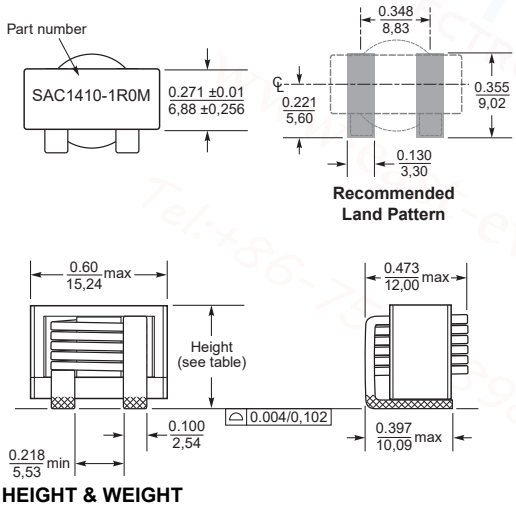
- High-current power supplies
- DC/DC power conversion
- Low-profile power stages (SEP1052)
- High-peak-current stages (SEP1412)

SEP1052 - OUTLINE & LAND PATTERN





SEP1400 - OUTLINE & LAND PATTERN



HEIGHT & WEIGHT

Series	Height max. (mm)	Weight (g)
SEP1052	5.20	1.6
SAC1408	8.26	3.5 - 3.8
SAC1410	10.56	4.8 - 5.2
SAC1412	12.66	6.1 - 6.7

ELECTRICAL CHARACTERISTICS AT 25 deg C

Part number	L [1] +/-20% (uH)	DCR typ. (mOhm)	DCR max. (mOhm)	SRF typ. (MHz)	Isat [2] 10% (A)	Isat [2] 20% (A)	Isat [2] 30% (A)	Irms [3] 20 deg C (A)	Irms [3] 40 deg C (A)
SEP1052-R80M	0.80	--	4.0	100	24.9	25.2	25.6	12.5	16.3
SEP1052-1R0M	1.0	--	4.0	95	16.5	17.0	17.5	12.5	16.3
SEP1052-1R2M	1.2	--	6.0	91	20.5	21.0	21.3	11.0	15.0
SEP1052-1R3M	1.3	--	4.0	81	12.9	16.8	17.2	12.5	16.3
SEP1052-1R5M	1.5	--	4.0	75	13.5	14.0	14.5	11.0	15.0
SEP1052-1R8M	1.8	--	6.0	70	13.3	13.8	14.3	11.0	15.0
SEP1052-2R0M	2.0	--	9.0	65	15.3	15.8	16.2	8.5	11.5
SEP1052-2R2M	2.2	--	4.0	58	8.9	9.6	10.0	12.5	16.3
SEP1052-2R5M	2.5	--	7.5	55	11.4	11.8	12.1	9.0	12.0
SEP1052-3R2M	3.2	--	6.0	53	7.3	7.8	8.5	11.0	15.0
SEP1052-4R0M	4.0	--	9.0	47	8.3	8.5	8.8	8.5	11.5
SEP1052-4R3M	4.3	--	7.5	44	6.4	6.8	7.0	9.0	12.0
SEP1052-5R7M	5.7	--	9.0	35	5.4	5.8	6.0	8.5	11.5
SAC1412-R30M	0.30	1.30	1.43	154	87.0	92.8	105.9	30	37
SAC1412-R50M	0.50	1.30	1.43	122	56.1	59.3	62.5	30	37
SAC1412-R68M	0.68	1.30	1.43	100	41.2	43.5	45.8	30	37
SAC1412-1R0M	1.0	1.30	1.43	78	28.9	31.0	32.2	30	37
SAC1412-1R5M	1.5	1.30	1.43	62	21.8	23.6	24.6	30	37
SAC1412-2R0M	2.0	1.30	1.43	50	16.9	18.5	19.4	30	37
SAC1412-3R6M	3.6	1.30	1.43	35	9.6	11.2	12.1	30	37
SAC1408-R30M	0.30	0.48	0.55	140	43.2	49.6	53.0	38	42
SAC1408-R50M	0.50	0.48	0.55	83	25.8	29.6	31.4	38	42
SAC1408-R68M	0.68	0.48	0.55	63	18.8	21.6	23.2	38	42
SAC1408-1R0M	1.0	0.48	0.55	48	12.1	14.2	16.1	38	42
SAC1410-1R5M	1.5	0.90	0.99	53	16.8	18.9	20.3	33	39
SAC1410-2R0M	2.0	0.90	0.99	45	12.1	13.9	15.0	33	39

[1] L measured at 100 kHz, 0.1 Vrms, 0 Adc.

[2] Isat: current at 10%, 20% or 30% inductance drop, at 25 deg C.

[3] Irms: specified temperature rise from 25 deg C.

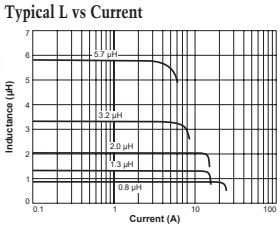
-- = DCR typical value not specified in the SER1052 source.

TEMPERATURE RATINGS

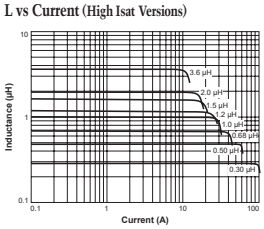
Parameter	SER1052	SER1400
Ambient [4]	-40 to +85 deg C	-40 to +125 deg C
Max. part temp.	125 deg C	165 deg C

[4] At 40 deg C rise Irms. Terminal 3 on SER1052 is for mounting only.

SEP1052: L vs Current



SAC1412: L vs Current



Typical curves from source datasheets. Drawings not to scale.