

SMT COMMON MODE CHOKES

FSCM01,02,03,04 SERIES

FEATURES:

- Toroid core
- SMD construction
- Excellent Mechanical Strength
- Excellent Solderability
- High Reliability
- Low Profile

OPTIONS:

- Packaging: Tape & Reel is standard (Qty: 2000pcs)
Bulk packaging available for smaller quantities
- Tolerance: 20% is standard, tighter tolerances available

COMMON APPLICATIONS:

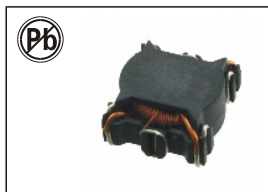
- DC/DC, AC/DC converter
- Filter and Noise suppression
- Communication System
- Automotive Systems
- Liquid Crystal Televisions
- Network Systems
- Computer Peripheral Equipment

ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) (uH)+30%/-35% 10KHz,0.1V	IDC (A)Max	DCR (Ω)Max	Lk (uH) Min 10KHz,0.1V
FSCM01-531Y	536	3.8	17.1	1.2
FSCM02-950Y	95	12.5	3	0.15
FSCM02-111Y	117	14	1.95	0.3
FSCM02-211Y	215	10	3.75	0.5
FSCM02-531Y	484	8	7.7	1.5
FSCM02-531Y	10150	1.4	210	25
FSCM03-610Y	61	7	2.9	0.15
FSCM03-960Y	96	6	4.3	0.25
FSCM03-131Y	130	5	6.75	0.4
FSCM03-281Y	280	4	13.2	0.7
FSCM03-381Y	383	3.3	18	1
FSCM03-112Y	1125	1.8	55	3
FSCM04-102Y	1030	9	9.75	3

NOTES:

1. The current rating (I_{rated}) is based upon the temperature rise of the component and represents the rms current which will cause a typical temperature rise of 40°C
2. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range
3. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. STRF01 becomes STRF01T). Shinhom complies to industry standard tape and reel specification EIA48
4. Components identified by an asterisk have an inductance tolerance of +/- 35%. All other components are +30/-35%
5. All specifications subject to change without notice.

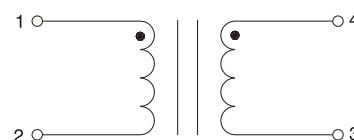
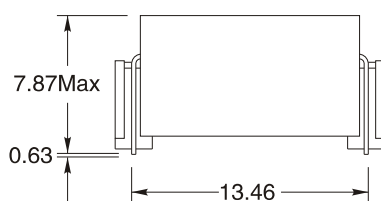
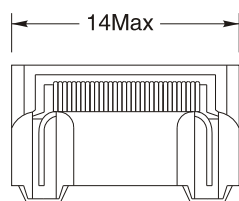
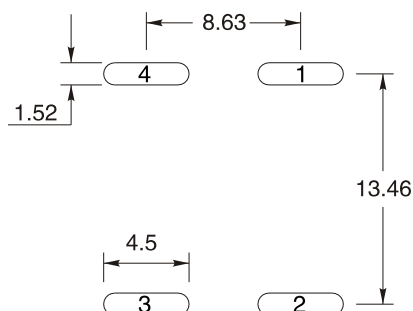
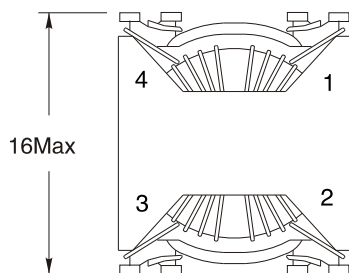


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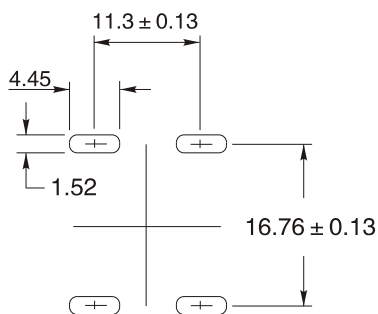
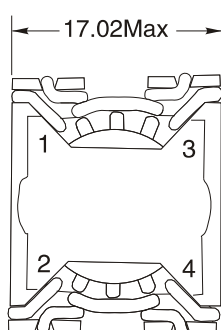
FSCM01,02,03,04 SERIES

PHYSICAL CHARACTERISTICS:

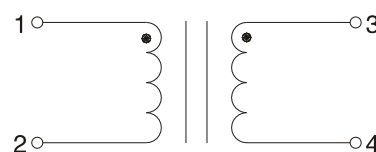
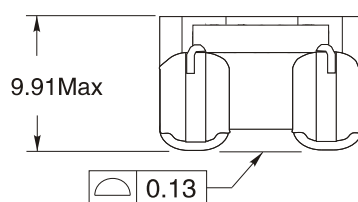
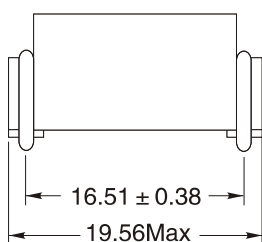
FSCM01

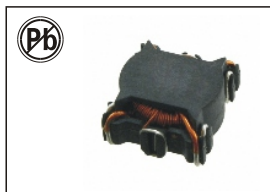


FSCM02



Suggested pad layout



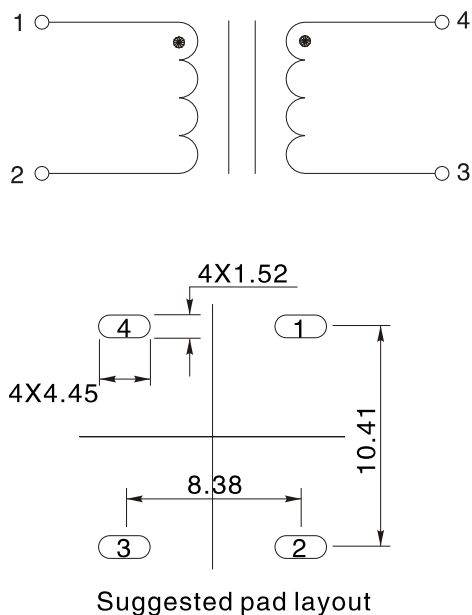
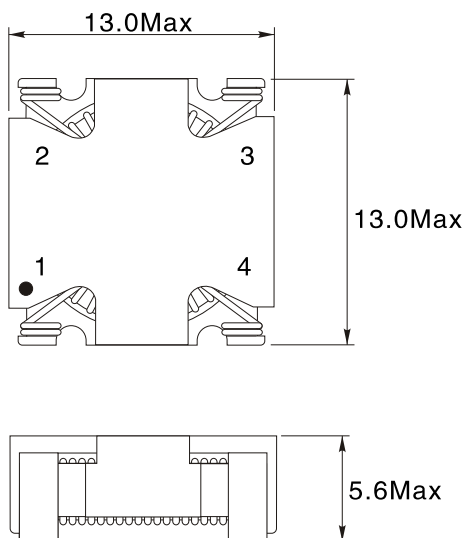


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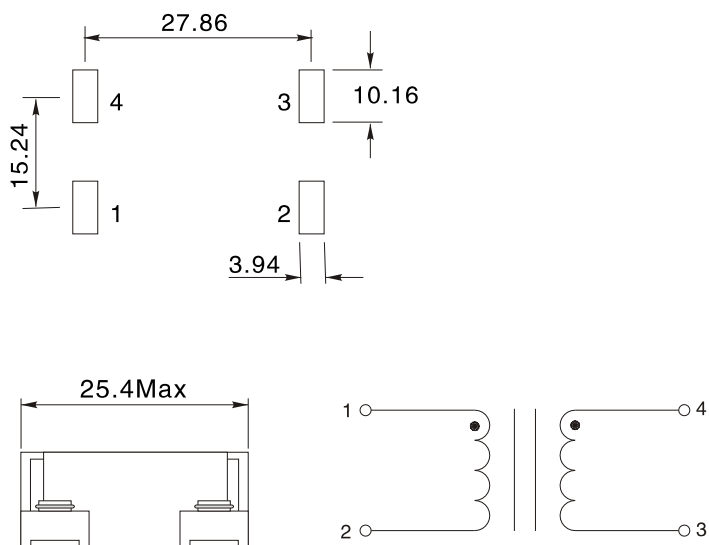
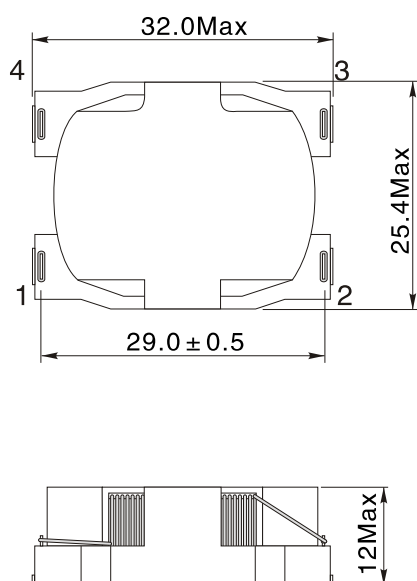
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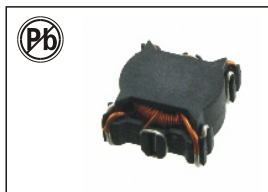
PHYSICAL CHARACTERISTICS:

FSCM03



FSCM04A



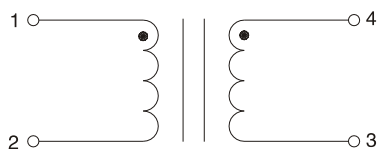
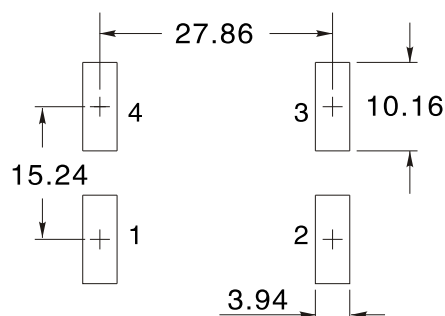
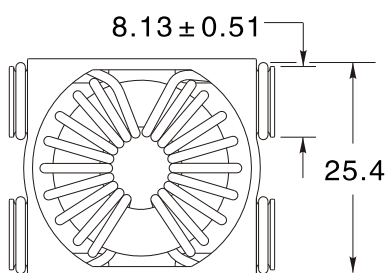
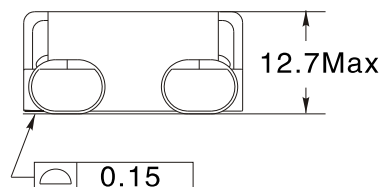
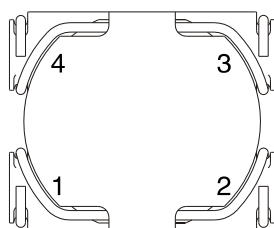


SMT COMMON MODE CHOKES

FSCM01,02,03,04 SERIES

PHYSICAL CHARACTERISTICS:

FSCM04B





FEATURES:

- Higher Frequency
- High Saturation Material
- Low EMI Radiation
- Pick and Place
- Low DC Resistance

COMMON APPLICATIONS:

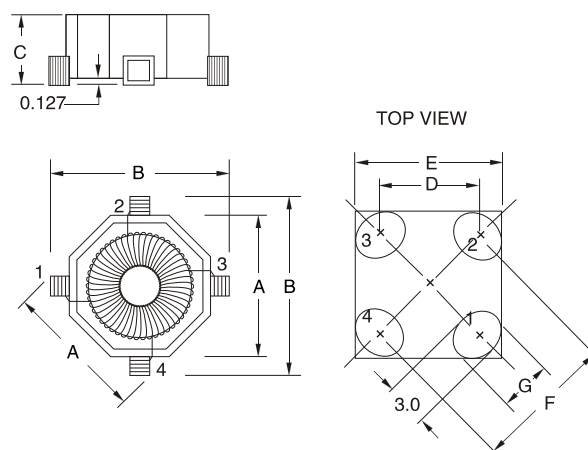
- Electronic Appliances
- DC – DC Conversion (Paraller Mode)
- Isolation/Coupling(Transformer)
- Input Filter(Serial Mode)
- EMI/RFI Suppression

ELECTRICAL CHARACTERISTICS:

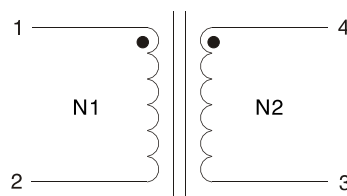
Part Number	L +/-25% (μ H)	IDC. A(max)	DCR Ω @20°C
FSCM0904-R33Y	0.33	10.0	0.0032
FSCM0904-R68Y	0.68	9.0	0.0039
FSCM0904-1R0Y	1.0	7.26	0.0060
FSCM0904-2R0Y	2.0	5.64	0.010
FSCM0904-5R0Y	5.0	4.27	0.017
FSCM0904-8R0Y	8.0	3.37	0.028
FSCM0904-100Y	10.0	2.84	0.039
FSCM0904-150Y	15.0	2.07	0.075
FSCM0904-200Y	20.0	1.71	0.109
FSCM0904-250Y	25.0	1.46	0.148
FSCM0904-330Y	33.0	1.22	0.213
FSCM0904-500Y	50.0	0.99	0.327
FSCM0904-680Y	68.0	0.92	0.375
FSCM0904-101Y	100.0	0.74	0.588
FSCM0904-151Y	150.0	0.67	0.713
FSCM0904-201Y	200.0	0.62	0.825
FSCM0904-301Y	300.0	0.56	1.012
FSCM0906-R33Y	0.33	10.9	0.0028
FSCM0906-R68Y	0.68	9.4	0.0039
FSCM0906-1R0Y	1.0	8.22	0.0050
FSCM0906-2R0Y	2.0	6.74	0.0077
FSCM0906-5R0Y	5.0	4.34	0.018
FSCM0906-8R0Y	8.0	3.50	0.027
FSCM0906-100Y	10.0	2.89	0.040
FSCM0906-150Y	15.0	2.69	0.046
FSCM0906-200Y	20.0	2.24	0.067
FSCM0906-250Y	25.0	1.89	0.095
FSCM0906-330Y	33.0	1.56	0.138
FSCM0906-500Y	50.0	1.28	0.206
FSCM0906-680Y	68.0	1.07	0.293
FSCM0906-101Y	100.0	0.75	0.596
FSCM0906-151Y	150.0	0.68	0.722
FSCM0906-201Y	200.0	0.64	0.814
FSCM0906-301Y	300.0	0.58	1.006

CHARACTERISTICS:

DIMENSIONS IN: mm



ELECTRONICAL SCHEMATIC



TECHNICAL INFORMATION:

Inductance measure at 100KHz 0.1VRms.

Insulation Resistance: 100Vdc 1KM Ω min.

Turns Ratio: 1.1 $\pm$ 0%

RDC:QuadTech 1880 Milliohmmeeter

Soldering temperature:260°C for 4 $\pm$ 1 seconds

Operating temperature:-40°C to +125°C

Storage Temperature: -55°C to +125°C

Different package available per special request

Max of 35% saturation on DC bias applied

DIMENSIONS IN: mm

Part Number	A	B	C	D	E	F	G
FSCM0904	8.89	11.43	4.2	7.0	10.72	9.95	3.68
FSCM0906	8.89	11.43	5.97	7.0	10.72	9.95	3.68



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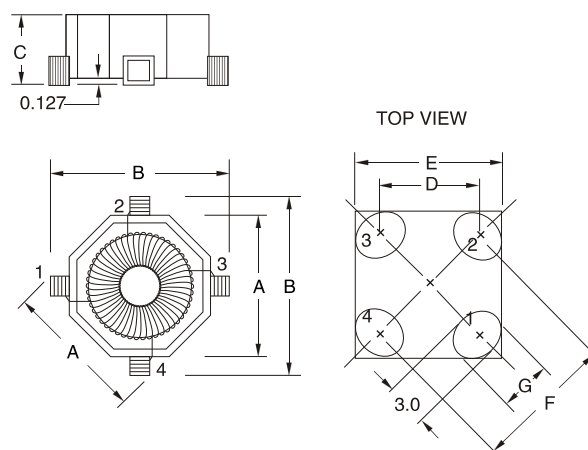
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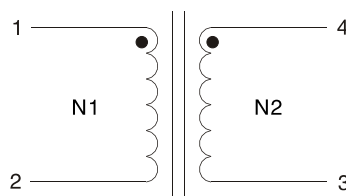
Part Number	L +/-25% (μ H)	IDC. A(max)	DCR Ω @20°C
FSCM1205-R33Y	0.33	11.4	0.0027
FSCM1205-R68Y	0.68	9.3	0.0041
FSCM1205-1R0Y	1.0	8.38	0.0051
FSCM1205-2R0Y	2.0	7.26	0.0068
FSCM1205-5R0Y	5.0	5.24	0.013
FSCM1205-8R0Y	8.0	4.23	0.020
FSCM1205-100Y	10.0	3.64	0.027
FSCM1205-150Y	15.0	3.25	0.033
FSCM1205-200Y	20.0	2.43	0.061
FSCM1205-250Y	25.0	2.34	0.065
FSCM1205-330Y	33.0	1.93	0.096
FSCM1205-500Y	50.0	1.56	0.147
FSCM1205-680Y	68.0	1.28	0.217
FSCM1205-101Y	100.0	1.05	0.325
FSCM1205-151Y	150.0	0.86	0.489
FSCM1205-201Y	200.0	0.71	0.711
FSCM1205-301Y	300.0	0.56	1.122
FSCM1207-R33Y	0.33	12.2	0.0026
FSCM1207-R68Y	0.68	10.6	0.0034
FSCM1207-1R0Y	1.0	9.23	0.0045
FSCM1207-2R0Y	2.0	8.38	0.0054
FSCM1207-5R0Y	5.0	7.21	0.0073
FSCM1207-8R0Y	8.0	5.49	0.013
FSCM1207-100Y	10.0	4.67	0.017
FSCM1207-150Y	15.0	3.87	0.025
FSCM1207-200Y	20.0	3.62	0.029
FSCM1207-250Y	25.0	3.02	0.041
FSCM1207-330Y	33.0	2.49	0.061
FSCM1207-500Y	50.0	2.05	0.089
FSCM1207-680Y	68.0	1.70	0.131
FSCM1207-101Y	100.0	1.37	0.201
FSCM1207-151Y	150.0	1.10	0.313
FSCM1207-201Y	200.0	0.92	0.447
FSCM1207-301Y	300.0	0.75	0.675

CHARACTERISTICS:

DIMENSIONS IN: mm



ELECTRONICAL SCHEMATIC



TECHNICAL INFORMATION:

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Part Number	A	B	C	D	E	F	G
FSCM1205	11.43	13.97	4.83	8.84	12.5	12.5	4.0
FSCM1207	11.43	13.97	6.35	8.84	12.5	12.5	4.0