●FEATURE

1. Shielded construction
2. Frequency range up to 5MHz, Low DCR(uH)
3. Low Buzz Noise



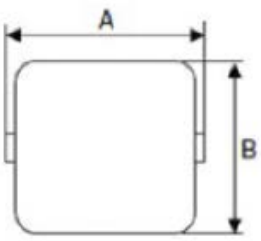
●APPLICATION

1. Notebook, server application
2. High current power supplier

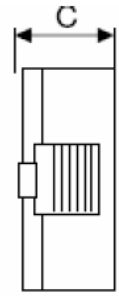
●ORDERING INFORMATION

WSM1365	-R18	T
PN	Inductance	M:±20%

●SHAPE AND DIMENSION

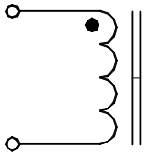


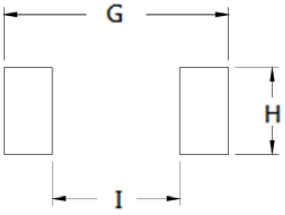
TOP VIEW



SIDE VIEW

●SCHEMATICS AND LAND PATTERNS(mm)





●SPECIFICATION (Marking=Inductance Value)

Dimension in mm

TYPE	A	B	C	G	H	I
WSM1365	13.50 MAX	12.90 MAX	6.50 MAX	13.75	4.95	7.8
WSM1050	10.5±1.0	10.2±0.5	5.30 MAX	11.50	4.00	3.8
WSM1350	13.0±1.0	12.8±0.5	5.00 MAX	13.75	4.95	7.8

●ELECTRICAL CHARACTERISTICS

PART NUMBER	L(uH)	RDC (mΩ) Typical	RDC (mΩ)Max	Isat (A)	Irms (A)
WSM1365-R18M	0.18±20%	0.4	0.5	60	35
WSM1365-1R0M	1.0±20%	1.5	2.0	49	32
WSM1365-1R2M	1.2±20%	2.0	2.5	40	28
WSM1365-2R2M	2.2±20%	3.6	4.2	38	22
WSM1365-3R3M	3.3±20%	5.8	6.8	35	18
WSM1365-4R7M	4.7±20%	7.0	8.5	30	13.5
WSM1365-7R3M	7.3±20%	8.0	9.0	13	12

Note1. Measurement frequency of Inductance value : at 100kHz

Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

Note3. Isat: DC current at which the inductance drops 20%(typ) from its value without current

Note4. Irms: Average current for 40°C temperature rise from 25°C ambient(typical)

Note5. Inductance tolerance: M: ±20%

PART NUMBER	L(uH)	RDC (mΩ) Typical	RDC (mΩ)Max	Isat (A)	Irms (A)
WSM1050-R16M	0.16±20%	0.51	0.56	58	24
WSM1050-R40M	0.40±20%	0.67	0.74	37	24
WSM1050-R72M	0.72±20%	1.3	1.43	35	22
WSM1050-1R2M	1.2±20%	1.80	1.98	25	20
WSM1050-1R8M	1.8±20%	3.5	3.85	18	16
WSM1050-2R4M	2.4±20%	4.75	5.23	17	14
WSM1050-3R3M	3.3±20%	5.90	6.49	15	12
WSM1050-4R2M	4.2±20%	7.10	7.81	14	11
WSM1050-5R5M	5.5±20%	10.30	11.33	12	10
WSM1350-4R8M	4.8±20%	-	11.55	13	11

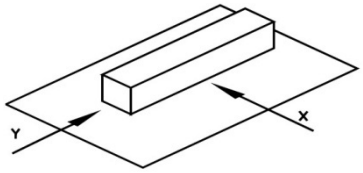
Note1. Measurement frequency of Inductance value : at 100kHz

Note2. Isat: DC current at which the inductance drops 30%(typ) from its value without current

Note3. Irms: Average current for 50°C temperature rise from 25°C ambient(typical)

●GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 85°C (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at below conditions. Terminal should not peel off. (refer to figure at right) 0.5kg



4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
6. Temperature characteristics: Inductance coefficient (0~2,000)x10-6/°C (-25~+80°C).
7. Humidity characteristics(Moisture Resistance): Inductance deviation within ±5%, after 96 hours in 90~95% relative humidity at 40 ±2°C and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within ±5%, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within ±5%, after being dropped once with 981m/s2 (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260°C, 10 seconds.
11. Storage environment

    Storage condition:

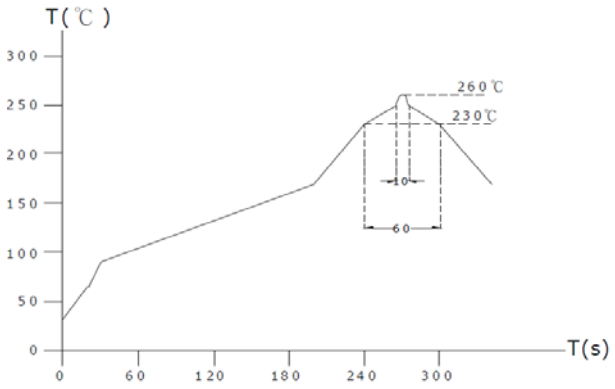
    Temperature Range: 10°C ~ 35°C (Generally: 21°C ~ 31°C)

    Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%)

    Transportation condition:

    Temperature Range: -35°C ~ 85°C, Humidity Range: 50% ~ 95% RH
12. Use components within 6 months. If 6 months or more have elapsed, check soldarability before use.
13. Reflow profile recommend:

Lead - free heat endurance test



Lead-free the recommended reflow condition

