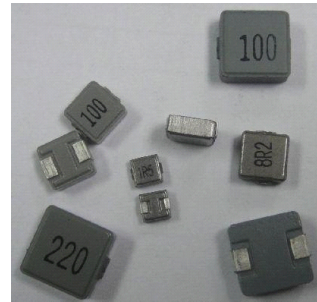


JY ELECTRONIC COMPANY

SMD Power CHOKE

JMC SERIES



■ FEATURES

Super low resistance, ultra high current rating.

High performance (Isat) realized by metal dust core.

Frequency Range: up to 1MHz.

RoHS compliant.

■ APPLICATIONS

PDA, notebook, desktop, and server applications.

Battery powered devices.

Low profile, high current power supplies.

DC/DC converters in distributed power systems.

DC/DC converters for field programmable gate array.

■ PRODUCT IDENTIFICATION

JMC 0603 -2R2 M □□

① ② ③ ④ ⑤

① Product Code

② Dimensions

③ Inductance Code

④ Tolerance Code

⑤ Pattern Code

■ PRODUCT SERIES

Dimension in mm	Dimension in mm					
	Part No.	A(Max)	B(Max)	C(Max)	D	E
	JMC0415	4.9	4.3	1.5	1.5±0.3	1.0±0.3
	JMC0402	4.9	4.3	2.0	1.5±0.3	1.0±0.3
	JMC0503	5.7	5.0	3.0	2.1±0.3	1.0±0.3
	JMC0506	5.7	5.0	6.0	2.1±0.3	1.0±0.5
	JMC0618	7.8	7.0	1.8	3.0±0.3	1.5±0.5
	JMC0602	7.8	7.0	2.0	3.0±0.3	1.5±0.5
	JMC0603	7.8	7.0	3.0	3.0±0.3	1.5±0.5
	JMC0604	7.8	7.0	4.0	3.0±0.3	1.5±0.5
	JMC0605	7.8	7.0	5.0	3.0±0.3	1.5±0.5
	JMC1004	11.8	10.8	4.0	3.2±0.5	2.2±0.5
	JMC1235	14.5	13.0	3.5	3.5±0.5	2.5±0.5
	JMC1205	14.5	13.0	5.0	3.5±0.5	2.5±0.5
	JMC1206	14.5	13.0	6.0	3.5±0.5	2.5±0.5
	JMC1265	14.5	13.0	6.5	3.5±0.5	2.5±0.5
	JMC1310	14.5	13.0	6.5	5.0±0.3	2.5±0.5

■ LAND PATTERNS

Dimension in mm	Dimension in mm			
	Part No.	A	B	C
	JMC0415	2.3	2.16	4.95
	JMC0402	2.3	2.16	4.95
	JMC0503	2.5	3.0	7.0
	JMC0506	2.5	3.0	7.0
	JMC0618	3.43	3.71	7.37
	JMC0602	3.43	3.71	7.37
	JMC0603	3.43	3.71	7.37
	JMC0604	3.43	3.71	7.37
	JMC0605	3.43	3.71	7.37
	JMC1004	4.1	5.4	13.6
	JMC1235	4.5	8.0	14.5
	JMC1205	4.5	8.0	14.5
	JMC1206	4.5	8.0	14.5
	JMC1265	4.5	8.0	14.5
	JMC1310	4.5	8.0	14.5

■ PRODUCT SPECIFICATIONS

JMC0415 SPECIFICATION

PART NUMBER	INDUCTANCE Lo (μ H) ± 20% @0A	DCR(m Ω)		HEAT RATING CURRENT (Idc) DC AMPS1	SATURATION CURRENT (Isat) DC AMPS2
		Typ.	Max		
JMC0415-1R0M	1.0	55	65	3.5	5
JMC0415-1R5M	1.5	63	75	3.25	4.5
JMC0415-2R2M	2.2	76	100	2.75	3

JMC0402 SPECIFICATION

PART NUMBER	INDUCTANCE Lo (μ H) ± 20% @0A	DCR(m Ω)		HEAT RATING CURRENT (Idc) DC AMPS1	SATURATION CURRENT (Isat) DC AMPS2
		Typ.	Max		
JMC0402-R22M	0.22	6.2	8	9	12.5
JMC0402-R36M	0.36	8.6	15	7	11
JMC0402-R47M	0.47	10	14	7	9.5
JMC0402-R56M	0.56	14	18	6.5	10
JMC0402-1R0M	1.0	25	27	4.5	7
JMC0402-1R5M	1.5	32	48	4	6
JMC0402-2R2M	2.2	47	58	3	4
JMC0402-3R3M	3.3	78	87	2	3
JMC0402-4R7M	4.7	95	105	2	3
JMC0402-5R6M	5.6	96	150	1.5	2.0

JMC0503 SPECIFICATION

PART NUMBER	INDUCTANCE Lo (μ H) ± 20% @0A	DCR(m Ω)		HEAT RATING CURRENT (Idc) DC AMPS1	SATURATION CURRENT (Isat) DC AMPS2
		Typ.	Max		
JMC0503-1R0M	1.0	14	16	6	8
JMC0503-1R5M	1.5	29	33	4.5	7
JMC0503-2R2M	2.2	33.1	37.4	4.5	7
JMC0503-3R3M	3.3	48.5	60	3.5	6
JMC0503-4R7M	4.7	71.8	85	3	4.5

JMC0506 SPECIFICATION

PART NUMBER	INDUCTANCE Lo (μ H) \pm 20% @0A	DCR(m Ω)		HEAT RATING CURRENT (Idc) DC AMPS1	SATURATION CURRENT (Isat) DC AMPS2
		Typ.	Max		
JMC0506-220M	22.0	122	140	1.5	2.5

JMC0618 SPECIFICATION

PART NUMBER	INDUCTANCE Lo (μ H) \pm 20% @0A	DCR(m Ω)		HEAT RATING CURRENT (Idc) DC AMPS1	SATURATION CURRENT (Isat) DC AMPS2
		Typ.	Max		
JMC0618-1R0M	1.0	17	22	7	14
JMC0618-2R2M	2.2	35	46	4	11
JMC0618-3R3M	3.3	62	68	3.5	8
JMC0618-4R7M	4.7	67	78	3.5	5
JMC0618-5R6M	5.6	99	137	2.8	3.8
JMC0618-6R8M	6.8	99	137	2.8	3.5
JMC0618-100M	10.0	99	137	2	3

JMC0602 SPECIFICATION

PART NUMBER	INDUCTANCE Lo (μ H) \pm 20% @0A	DCR(m Ω)		HEAT RATING CURRENT (Idc) DC AMPS1	SATURATION CURRENT (Isat) DC AMPS2
		Typ.	Max		
JMC0602-1R0M	1.0	17	20	7	14
JMC0602-2R2M	2.2	33.5	64	6	10
JMC0602-3R3M	3.3	50	18	3.3	7
JMC0602-4R7M	4.7	64	70	3	5
JMC0602-6R8M	6.8	85	115	3	4
JMC0602-100M	10.0	92	154	2.8	4

JMC0603 SPECIFICATION

PART NUMBER	INDUCTANCE Lo (μ H) \pm 20% @0A	DCR(m Ω)		HEAT RATING CURRENT (Idc) DC AMPS1	SATURATION CURRENT (Isat) DC AMPS2
		Typ.	Max		
JMC0603-R22M	0.22	2.7	3.5	23	40
JMC0603-R33M	0.33	3.2	3.9	20	30
JMC0603-R47M	0.47	4.0	4.5	17.5	26
JMC0603-R56M	0.56	4.7	5.5	15.5	26
JMC0603-R68M	0.68	5	5.5	15.5	25
JMC0603-R82M	0.82	6.5	8	13	24
JMC0603-1R0M	1.0	9	10.0	11	22
JMC0603-1R5M	1.5	11	16	9.5	18
JMC0603-2R2M	2.2	15	20	8.5	14
JMC0603-3R3M	3.3	28	36	6	13.5
JMC0603-4R7M	4.7	34	40	5.5	10
JMC0603-5R6M	5.6	47	60	5	8
JMC0603-6R8M	6.8	51	60	4.5	8
JMC603-8R2M	8.2	60	68	4	7.5
JMC0603-100M	10.0	99	105	3	6
JMC0603-150M	15.0	126	140	2.8	4
JMC0603-220M	22.0	143	167	2.5	3.5

JMC0604 SPECIFICATION

PART NUMBER	INDUCTANCE Lo (μ H) \pm 20% @0A	DCR(m Ω)		HEAT RATING CURRENT (Idc) DC AMPS1	SATURATION CURRENT (Isat) DC AMPS2
		Typ.	Max		
JMC0604-R33M	0.33	2.0	2.3	20	30
JMC0604-R56M	0.56	3.6	4.5	17	25
JMC0604-R68M	0.68	3.8	4.2	13	15
JMC0604-1R5M	1.5	13.8	14	10	19
JMC0604-2R2M	2.2	15	18	8.5	16
JMC0604-3R3M	3.3	21	23	7	13
JMC0604-4R7M	4.7	23	30	8	10

JMC0605 SPECIFICATION

PART NUMBER	INDUCTANCE Lo (μ H) ± 20% @0A	DCR(mΩ)		HEAT RATING CURRENT (Idc) DC AMPS1	SATURATION CURRENT (Isat) DC AMPS2
		Typ.	Max		
JMC0605-R22M	0.22	2.3	2.8	30	50
JMC0605-R47M	0.47	3.1	3.9	20	21
JMC0605-R68M	0.68	5.5	6	14	19
JMC0605-R82M	0.82	4.5	4.9	16.5	17
JMC0605-1R0M	1.0	5.5	6.5	13	15
JMC0605-1R5M	1.5	9	12	10	18
JMC0605-2R2M	2.2	10	12.5	8	12
JMC0605-3R3M	3.3	14	20.9	7	9
JMC0605-4R7M	4.7	20	25	6.5	7
JMC0605-6R8M	6.8	29.5	38	5.0	7
JMC0605-100M	10.0	61	71	4.5	5.3
JMC0605-150M	15.0	90	120	2.5	4
JMC0605-220M	22.0	137	160	2	3
JMC0605-330M	33.0	184	237	2	3
JMC0605-470M	47.0	203	280	1.9	2.5

JMC1004 SPECIFICATION

PART NUMBER	INDUCTANCE Lo (μ H) ±20% @0A	DCR(mΩ)		HEAT RATING CURRENT (Idc) DC AMPS1	SATURATION CURRENT (Isat) DC AMPS2
		Typ.	Max		
JMC1004-R33M	0.33	1.1	1.5	30	50
JMC1004-R36M	0.36	1.1	1.5	30	50
JMC1004-R47M	0.47	1.1	1.8	26	40
JMC1004-R56M	0.56	1.5	2.2	25	33
JMC1004-R68M	0.68	2.0	3.0	23	40
JMC1004-1R0M	1.0	3.2	4.1	18	36
JMC1004-1R5M	1.5	5.0	6.0	16	32
JMC1004-2R2M	2.2	7	9	12	25
JMC1004-3R3M	3.3	10.8	13.5	10	14
JMC1004-4R7M	4.7	15.0	18	8	14
JMC1004-5R6M	5.6	18.2	25	8	16
JMC1004-6R8M	6.8	23.5	28	6.5	9
JMC1004-7R2M	7.2	32	36	4.9	8
JMC1004-8R2M	8.2	60	68	4.5	7.5
JMC1004-100M	10.0	31	36.5	6	9
JMC1004-150M	15.0	126	140	4	5
JMC1004-220M	22.0	80	85	3.5	5
JMC1004-330M	33.0	137	155	3	5
JMC1004-470M	47.0	141	155	3	5

JMC1235 SPECIFICATION

PART NUMBER	INDUCTANCE Lo (μ H) ±20% @0A	DCR(mΩ)		HEAT RATING CURRENT (Idc) DC AMPS1	SATURATION CURRENT (Isat) DC AMPS2
		Typ.	Max		
JMC1235-R33M	0.33	0.9	1.5	20	50
JMC1235-R47M	0.47	1.4	2.0	18	40
JMC1235-R56M	0.56	1.7	2.5	16	36
JMC1235-R68M	0.68	1.8	2.7	15	33
JMC1235-1R0M	1.0	2.8	3.5	15	35
JMC1235-1R5M	1.5	4.7	6.0	14	24
JMC1235-2R2M	2.2	7.2	9.0	12	18
JMC1235-3R3M	3.3	10	13	11	16

JMC1205 SPECIFICATION

PART NUMBER	INDUCTANCE Lo (μ H) ±20% @0A	DCR(mΩ)		HEAT RATING CURRENT (Idc) DC AMPS1	SATURATION CURRENT (Isat) DC AMPS2
		Typ.	Max		
JMC1205-R33M	0.33	0.85	1.1	42	80
JMC1205-R47M	0.47	1.1	1.5	38	65
JMC1205-R56M	0.56	1.4	1.7	36	55
JMC1205-R68M	0.68	1.5	1.7	34	54
JMC1205-R82M	0.82	2.0	2.5	31	53
JMC1205-1R0M	1.0	2.4	3.5	29	50
JMC1205-1R2M	1.2	2.8	4.0	25	49
JMC1205-1R5M	1.5	3.8	5.0	21	48
JMC1205-1R8M	1.8	4.2	6.0	19	40
JMC1205-2R2M	2.2	4.8	7.2	20	32
JMC1205-3R3M	3.3	6.2	9.2	15	30
JMC1205-4R7M	4.7	12.8	15.0	12	27
JMC1205-5R6M	5.6	14.0	17	12	22
JMC1205-6R8M	6.8	15.4	18.5	11	21
JMC1205-8R2M	8.2	18.9	22.5	10	18
JMC1205-100M	10.0	21.4	25.5	9	16
JMC1205-150M	15.0	54	60	6	12
JMC1205-220M	22.0	63	70	4	8
JMC1205-330M	33.0	70	80	3	6
JMC1205-470M	47.0	78	90	2.5	5.5
JMC1205-560M	56.0	143	191.6	2	4
JMC1205-680M	68.0	154	206.7	1.5	3.5

JMC1206 SPECIFICATION

PART NUMBER	INDUCTANCE Lo (μ H) ±20% @0A	DCR(mΩ)		HEAT RATING CURRENT (Idc) DC AMPS1	SATURATION CURRENT (Isat) DC AMPS2
		Typ.	Max		
JMC1206-100M	10.0	22	25	10	12.5
JMC1206-220M	22.0	44	50	5	7.5

JMC1265 SPECIFICATION

PART NUMBER	INDUCTANCE Lo (μ H) \pm 20% @0A	DCR(m Ω)		HEAT RATING CURRENT (Idc) DC AMPS1	SATURATION CURRENT (Isat) DC AMPS2
		Typ.	Max		
JMC1265-R56M	0.56	1.2	1.6	37	62
JMC1265-R68M	0.68	1.3	1.8	34	54
JMC1265-R82M	0.82	1.6	2.0	33	50
JMC1265-1R0M	1.0	1.7	2.5	25	47
JMC1265-1R5M	1.5	2.5	3.5	22	45
JMC1265-1R8M	1.8	2.8	3.6	20	41
JMC1265-2R2M	2.2	3.5	4.5	18	40
JMC1265-3R3M	3.3	6.3	7.0	15	35
JMC1265-4R7M	4.7	10.8	13.0	12	30
JMC1265-5R6M	5.6	11	15	11	26.5
JMC1265-6R8M	6.8	13.1	17	10	16.5
JMC1265-8R2M	8.2	14.5	18	8	16
JMC1265-100M	10.0	17	25	9	15.5
JMC1265-150M	15.0	30.5	38	6	9
JMC1265-220M	22.0	44	48	5	7.5
JMC1265-330M	33.0	57.5	66	5	6.5
JMC1265-470M	47.0	80	90	3.5	5.5
JMC1265-560M	56.0	90	110	3	6
JMC1265-680M	68.0	97	123	4	6

JMC1310 SPECIFICATION

PART NUMBER	INDUCTANCE Lo (μ H) \pm 20% @0A	DCR(m Ω)		HEAT RATING CURRENT (Idc) DC AMPS1	SATURATION CURRENT (Isat) DC AMPS2
		Typ.	Max		
JMC1310-100M	10.0	13	15	7	10

NOTES:

1. Idc : DC current (A) that will cause an approximate Δ T of 40°C
2. Isat : DC current (A) that will cause Lo to drop approximately 20%
3. All test data is referenced to 25°C ambient
4. Operating Temperature Range -55°C to +125°C
5. The part temperature (ambient + temp rise) should not exceed 125°C under the worst operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature.
Part temperature should be verified in the end application.

6. TEST FREQUENCY:100KHz,0.25V

7. TESTING INSTRUMENT L :Agilent4284A,WK4235,CH3302/G LCR METER
CH1320,CH1320S BIAS CURRENT SOURCE

R_{dc} :CH502BC MICRO OHMMETER