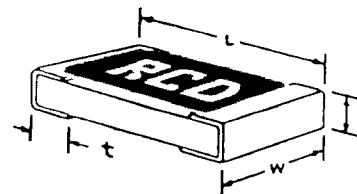


THICK FILM CHIP SURFACE MOUNT RESISTORS 1/20 WATT (0402) TO 3 WATT (4020)

MC SERIES



- Widest selection in the industry!
- Wraparound termination with *No Leach™* nickel barrier
- Heavy solder plating facilitates the soldering process
- 1% and 5% chips available from stock (refer to pg. 4)
- Available on exclusive 'SWIFT' delivery program
- ZC is zero-ohm jumper, MC is 200 ppm, MCR is 100 ppm
- 4 digit marking available on

1210	122
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 tolerances (0603 available with 3-digit marking only, 0402 and 4020 are not available with marking).
- User-trimmable and wire-bondable chips available
- Values from 0.1 ohm to 100 M available

Wide choice of sizes at economy prices!

RCD's chip resistors were designed to meet the stringent environmental requirements of MIL-R-55342. The MC Series can therefore offer significant performance improvements over industry average. Pricing remains extremely competitive due to fully automated production. Delivery of the international standard 1206 size is from stock in all 1% and 5% values from 10Ω to 1M. **RCD now offers a turnkey surface mount assembly service. Why not consider us to assemble your next SM project?**

ACTUAL SIZE	RCD Type MC-, MCR-, ZC	MC/MCR Wattage at 70°C	MC/MCR Dual Rating*	MC/MCR Voltage Rating	TYPE ZC Amp Rating	STANDARD Resistance Range	L(Length)	W(Width)	T(Thickness)	t(term. width)
New! →	0402	.05	.075	50V	.5A	10Ω to 3.3 MΩ	.040 ± .004 [1.00 ± .1]	.020 ± .004 [.5 ± .1]	.014 ± .004 [.35 ± .1]	.010 ± .004 [.25 ± .1]
	0603	.0625	0.1	50V	1A	10Ω to 3.3 MΩ	.061 ± .005 [1.55 ± .12]	.031 ± .004 [.8 ± .1]	.016 ± .006 [.40 ± .15]	.010 ± .006 [.25 ± .15]
	0805	0.1	0.125	100V	1A	1Ω to 10 MΩ	.079 ± .006 [2.0 ± .15]	.050 ± .006 [1.25 ± .15]	.020 ± .006 [.50 ± .15]	.016 ± .008 [.4 ± .2]
	1A (Stock Item)	0.125	0.25	200V	2A	1Ω to 22 MΩ	.126 ± .008 [3.2 ± .2]	.061 ± .006 [1.55 ± .15]	.022 ± .006 [.56 ± .15]	.020 ± .008 [.51 ± .2]
	1206	0.25	0.30	200V	2A	3.3Ω to 10 MΩ	.126 ± .008 [3.2 ± .2]	.061 ± .006 [1.55 ± .15]	.024 ± .006 [.61 ± .15]	.020 ± .008 [.51 ± .2]
	1210	0.25	0.50	200V	2A	10Ω to 10 MΩ	.126 ± .008 [3.2 ± .2]	.098 ± .008 [2.5 ± .2]	.022 ± .010 [.56 ± .25]	.020 ± .010 [.5 ± .25]
New! →	1812	0.50	0.75	200V	3A	10Ω to 10 MΩ	.178 ± .008 [4.5 ± .2]	.125 ± .008 [3.2 ± .2]	.025 ± .010 [.63 ± .25]	.020 ± .010 [.5 ± .25]
	2010	0.50	0.75	200V	NA	10Ω to 10 MΩ	.197 ± .008 [5.0 ± .2]	.102 ± .008 [2.6 ± .2]	.025 ± .010 [.63 ± .25]	.020 ± .010 [.50 ± .25]
	2512	1.0	1.5	250V	3A	10Ω to 10 MΩ	.245 ± .015 [6.22 ± .38]	.125 ± .010 [3.2 ± .25]	.025 ± .010 [.63 ± .25]	.030 ± .018 [.75 ± .46]
	4020	2.0	3.0	350V	NA	10Ω to 10 MΩ	.394 ± .01 [10.0 ± .25]	.197 ± .010 [5.0 ± .25]	.028 ± .012 [.71 ± .3]	.030 ± .018 [.75 ± .46]

* Chips may be operated up to the dual rated level with consideration of mounting density, termination pad area, board material, and ambient temperature to control self-heating to 125°C max.

PERFORMANCE CHARACTERISTICS

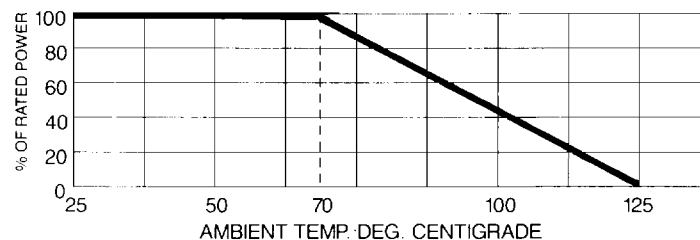
Characteristic	Test Method	Max. ΔR + .05Ω (10Ω to 1MΩ range)
Temperature Coefficient (Typ.)	-55 to + 125°C	±100 or ±200 ¹ ppm
Thermal Shock (-55° to + 150°C)	MIL-Std-202, M 107	0.5%
Short Time Overload (2.5 × 5 sec) ²	M 55342 p. 4, 7, 5	0.5%
Low Temp. Operation (-55°C)	M 55342 p. 4, 7, 4	0.5%
High Temp. Exposure (125°C, 100 hrs)	M 55342 p. 4, 7, 6	0.5%
Resistance to Bonding Exposure	M 55342 p. 4, 7, 7	0.25% _e
Moisture Resistance	MIL-Std-202, M 106	0.5%
Load Life (1000 hours)	MIL-Std-202, M 108	1.0%*
Solderability	MIL-Std-202, M 208	95% Min. Coverage

¹Load life for dual rating is ± 5% + .05Ω Max.

²*MCR is 100ppm, "MC" is 200ppm 10Ω-1M, 400ppm <10Ω or > 1M

³STO test is 2x rated power on MC1206 type. STO test does not apply to dual wattage ratings

DERATING CURVE



PACKAGING

Type MC-, MCR-, ZC-	Packaging Options*
0402, 0603, 0805	bulk, 8mm tape
1A, 1206	bulk, magazine, 8mm tape
1210	bulk, 8mm tape
1812, 2010, 2512	bulk, 12mm tape
4020	bulk, 16mm tape

*Standard 8mm tape is paper, other sizes are embossed plastic. Plastic tape and reels are available on 8mm size but must be requested at the time of ordering.

HOW TO ORDER:

MCR 1A 100Ω (ohm) 1% T

RCD Type _____
(MC is 200 ppm, MCR is 100 ppm,
ZC is chip jumper)

Resistance Value (.05Ω Max. on ZC type) _____

Tolerance (±1%, ±2%, ±5%, ±10%) _____

Packaging - 'B' is bulk, 'T' is Tape & Reel,
'M' is Magazine Cartridge

Also advise at the time of ordering whether marking on the chip is required.
(RCD option if not specified by customer)

RCD Components, Inc., 520 East Industrial Park Dr., Manchester, NH USA 03109-1824

Tel: (603) 669-0054

Fax: (603) 669-5455