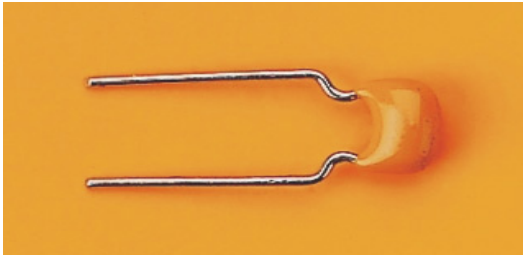


MCRR Series

Multilayer Ceramic Capacitors



General Information



Lead length=25.4min,
Lead dia=0.508

Features:

- Cost effective dipped radial multilayer ceramic capacitors.
- High reliability and performance.
- Applications for C0G dielectric tuned circuits and filters where low loss and stability are required.
- X7R dielectric offers high capacitance values in compact sizes with good stability.
- Z5U dielectric can be used in coupling and decoupling applications where change of capacitance with temperature is not important.

Conformally Coated Radial Leaded MLC.

Temperature Coefficients: C0G (NP0), X7R, Z5U.

200, 100, 63/50 Volts.

Case Material: Epoxy.

Lead Material: Solderable.

C0G (NP0) Dielectric

Size and Capacitance Specifications

EIA Characteristic

Height (H)		3.81		7.62	
Width (W)		3.81		5.08	
Depth (D)		2.54		3.18	
Lead Spacing (L.S.)		2.54		5.08	
Lead Diameter (L.D.)		0.508		0.508	
Capacitance in pF	Voltage WVDC	Voltage, DC		Voltage, DC	
	Part Number	200	100	200	100
10	MCRR25100C0GJ0200				
22	MCRR25220C0GJ0200				
33	MCRR25330C0GJ0200				
47	MCRR25470C0GJ0200				
10	MCRR50100C0GJ0200				
22	MCRR50220C0GJ0200				
33	MCRR50330C0GJ0200				
47	MCRR50470C0GJ0200				
100	MCRR50101C0GJ0200				
220	MCRR50221C0GJ0200				
100	MCRR25101C0GJ0100				
220	MCRR25221C0GJ0100				
330	MCRR25331C0GJ0100				
470	MCRR25471C0GJ0100				
1000	MCRR25102C0GJ0100				
470	MCRR50471C0GJ0100				
1000	MCRR50102C0GJ0100				

= Industry preferred values

Dimensions: Millimetres



MCRR Series

Multilayer Ceramic Capacitors



X7R Dielectric

Size and Capacitance Specifications

EIA Characteristic

Height (H)		3.81	7.62	5.08	7.62	7.62
Width (W)		3.81	5.08	5.08	5.08	7.62
Depth (D)		2.54	3.18	3.18	3.18	3.81
Lead Spacing (L.S.)		2.54	5.08	2.54	5.08	5.08
Lead Diameter (L.D.)		0.508	0.508	0.508	0.508	0.508
Capacitance in pF	Voltage WVDC	WVDC		WVDC	WVDC	WVDC
	Part Number	100	63/50	100	63/50	63/50
1000	MCRR25102X7RK0100					
2200	MCRR25222X7RK0100					
3300	MCRR25332X7RK0100					
4700	MCRR25472X7RK0100					
10,000	MCRR25103X7RK0100					
22,000	MCRR25223X7RK0100					
1000	MCRR50102X7RK0100					
2200	MCRR50222X7RK0100					
3300	MCRR50332X7RK0100					
4700	MCRR50472X7RK0100					
10,000	MCRR50103X7RK0100					
22,000	MCRR50223X7RK0100					
100,000	MCRR50104X7RK0100					
10,000	MCRR25103X7RK0050					
33,000	MCRR25333X7RK0050					
47,000	MCRR25473X7RK0050					
100,000	MCRR25104X7RK0050					
100,000	MCRR25104Z5UM0050					
33,000	MCRR50333X7RK0050					
47,000	MCRR50473X7RK0050					
100,000	MCRR50104X7RK0050					
220,000	MCRR50224X7RK0050					
470,000	MCRR50474X7RK0050					
1,000,000	MCRR50105X7RK0050					

Dimensions: Millimetres

= Industry preferred values



MCRR Series

Multilayer Ceramic Capacitors




Z5U Dielectric

Size and Capacitance Specifications

EIA Characteristic

Height (H)		5.08	7.62	7.62
Width (W)		5.08	5.08	7.62
Depth (D)		3.18	3.18	3.81
Lead Spacing (L.S.)		2.54	5.08	5.08
Lead Diameter (L.D.)		0.508	0.508	0.508
Capacitance in pF	Voltage WVDC	WVDC	WVDC	WVDC
	Part Number	63/50	63/50	63/50
100,000	MCRR25104Z5UM0050			
100,000	MCRR50104Z5UM0050			
470,000	MCRR50474Z5UM0050			
1,000,000	MCRR50105Z5UM0050			
2,200,000	MCRR50225Z5UM0050			

Dimensions: Millimetres

 = Industry preferred values

MCRR Series

Multilayer Ceramic Capacitors



Part Number Explanation:

MCRR



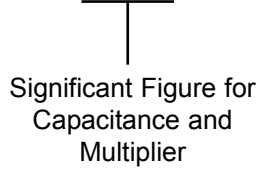
Type

25



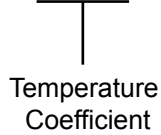
Lead Pitch

100



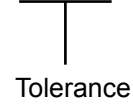
Significant Figure for
Capacitance and
Multiplier

X7R



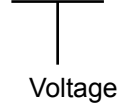
Temperature
Coefficient

J



Tolerance

0200



Voltage

Part Number Codes

Lead Pitch:

25 = 2.54, 50 = 5.08

Significant Figures of Capacitance and Multiplier:

First two digits are the significant figures of capacitance. Third digit indicates the additional number of zeros.

For example, order 100,000 pF as 104

Temperature Coefficient:

C0G (NP0), X7R, Z5U

Capacitance Tolerances:

C0G (NP0) : J = $\pm 5\%$
X7R : K = $\pm 10\%$
Z5U : M = $\pm 20\%$

Voltages:

50 = 63/50 Vdc

100 = 100 Vdc

200 = 200 Vdc

MARR Series

Multilayer Ceramic Capacitors



Notes:

International Sales Offices:



AUSTRALIA – Farnell InOne
Tel No: ++ 61 2 9645 8888
Fax No: ++ 61 2 9644 7898



FINLAND – Farnell InOne
Tel No: ++ 358 9 560 7780
Fax No: ++ 358 9 345 5411



NETHERLANDS – Farnell InOne
Tel No: ++ 31 30 241 7373
Fax No: ++ 31 30 241 7333



SWITZERLAND – Farnell InOne
Tel No: ++ 41 1 204 64 64
Fax No: ++ 41 1 204 64 54



AUSTRIA – Farnell InOne
Tel No: ++ 43 662 2180 680
Fax No: ++ 43 662 2180 670



FRANCE – Farnell InOne
Tel No: ++ 33 474 68 99 99
Fax No: ++ 33 474 68 99 90



NEW ZEALAND – Farnell InOne
Tel No: ++ 64 9 357 0646
Fax No: ++ 64 9 357 0656



UK – Farnell InOne
Tel No: ++ 44 8701 200 200
Fax No: ++ 44 8701 200 201



BELGIUM – Farnell InOne
Tel No: ++ 32 3 475 2810
Fax No: ++ 32 3 227 3648



GERMANY – Farnell InOne
Tel No: ++ 49 89 61 39 39 39
Fax No: ++ 49 89 613 59 01



NORWAY – Farnell InOne
Tel No: ++ 45 44 53 66 66
Fax No: ++ 45 44 53 66 02



UK – BuckHickman InOne
++ 44 8450 510 150
++ 44 8450 510 130



BRAZIL – Farnell-Newark InOne
Tel No: ++ 55 11 4066 9400
Fax No: ++ 55 11 4066 9410



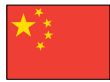
HONG KONG – Farnell-Newark InOne
Tel No: ++ 852 2268 9888
Fax No: ++ 852 2268 9899



PORTUGAL – Farnell InOne
Tel No: ++ 34 93 475 8804
Fax No: ++ 34 93 474 5288



UK – CPC
++ 44 8701 202 530
++ 44 8701 202 531



CHINA – Farnell-Newark InOne
Tel No: ++86 10 6238 5152
Fax No: ++86 10 6238 5022



IRELAND – Farnell InOne
Tel No: ++ 353 1 830 9277
Fax No: ++ 353 1 830 9016



SINGAPORE – Farnell-Newark InOne
Tel No: ++ 65 6788 0200
Fax No: ++ 65 6788 0300



EXPORT – Farnell InOne
Tel No: ++ 44 8701 200 208
Fax No: ++ 44 8701 200 209

For enquiries from all other markets



DENMARK – Farnell InOne
Tel No: ++ 45 44 53 66 44
Fax No: ++ 45 44 53 66 06



ITALY – Farnell InOne
Tel No: ++ 39 02 93 995 200
Fax No: ++ 39 02 93 995 300



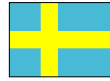
SPAIN – Farnell InOne
Tel No: ++ 34 93 475 8805
Fax No: ++ 34 93 474 5107



ESTONIA – Farnell InOne
Tel No: ++ 358 9 560 7780
Fax No: ++ 358 9 345 5411



MALAYSIA – Farnell-Newark InOne
Tel No: ++ 60 3 7873 8000
Fax No: ++ 60 3 7873 7000



SWEDEN – Farnell InOne
Tel No: ++ 46 8 730 50 00
Fax No: ++ 46 8 83 52 62

<http://www.farnellinone.com>

<http://www.buckhickmaninone.com>

<http://www.cpc.co.uk>

Disclaimer This data sheet and its contents (the "Information") belong to the Premier Farnell Group (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell plc 2004.

