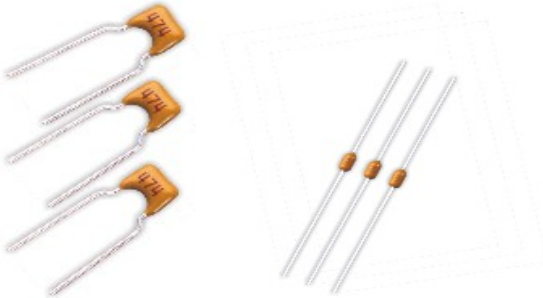


Vatronics Technologies Limited.

VCM Series Ceramic Multilayer Capacitors (Radial & Axial)

Vatronics makes Radial leads MLCC and axial leads MLCC, Capacitance: from 0.5PF to 10uF,Working voltage: from 25V to 100V,Dielectric types: NPO (COG), X7R, Y5V,Z5U, Capacitance tolerance: +/-0.1PF to +80/-20%,Package styles: tape and reel, Ammo, Bulk. Radial leads MLCC have various lead spaces: 2.54/3.5/4.57/5.08/7.5mm



Drawing of output



Vatronics Radial Type Size,Capacitance and Voltage

Size	Dimensions(mm)					Voltage	Capacitance(pF)		
	F	Wmax	Hmax	Tmax	D		COG(NPO)	X7R	Y5V(Z5U)
0805	5.0	4.2	3.8	3.8	0.5	25V	0R5-332	221-105	103-105
						50V	0R5-222	221-105	103-684
	2.5					100V	0R5-102	221-683	
1206	5.0 2.5	5.0	4.5	3.8	0.5	25V	0R5-682	102-105	103-105
						50V	0R5-472	102-105	103-105
						100V	0R5-392	102-683	•
1210	5.0	7.6	5.5	3.8	0.5	25V	561-103	102-334	104-105
						50V	561-682	102-205	104-105
						100V	561-472	102-104	
1812	5.0	8.5	8.5	3.8	0.5	25V	102-153	103-474	154-335
						50V	102-103	103-334	154-225
						100V	102-682	103-224	•
2225	7.5	10.5	9.5	4.2	0.5	25V	102-223	103-105	684-475
						50V	102-223	103-105	684-335
						100V	102-103	103-474	
3035	7.5	12.5	10.5	4.2	0.5	25V	102-104	103-225	105-106
						50V	102-473	103-225	105-685
						100V	102-333	103-105	•

Vatronics Axial Type Size,Capacitance and Voltage

Size	Dimensions(mm)					Voltage	Capacitance(PF)		
	Lmax	Dmax	F		d		COG(NPO)	X7R	Y5V(Z5U)
17	4.3	2.5	5.0	10	0.45	25V	0R5~332	331~104	103~105
						50V	0R5~222	331~473	103~684
						100V	0R5~102	331~223	•
20	5.1	3	7.5	10	0.45	25V	0R5~472	102~224	103~125
						50V	0R5~392	102~104	103~105
						100V	0R5~152	102~683	•

Vatronics General Specification:

•		(NPO,COG)		(X7R)		(Y5V,Z5U)	
Capacitance Range		0.5pF~104		221~225		103~106	
Capacitance Tolerance		B=±0.1pF	C=±0.25pF	K=±10%		M=±20%	
		D=±0.5pF	F=±1%	M=±20%		S=+50%~-20%	
		G=±2%	J=±5%	S=+50%~-20%		Z=+80%~-20%	
		K=±10%	M=±20%	•		P=+100%~0	
		B,C,D for C <10pF		•		•	
Rated Voltage		16,25, 50, 63, 100,200,500,1000,2000 VDC				16,25,50,100 VDC	
Dissipation Factor(DF)		0.15%Max		2.5%Max		5.0%Max	
		(20•,1MHZ,1VDC)		(20•,1KHZ,1VDC)		(20•,1KHZ,0.3VDC)	
Insulation Resistance		C≤10nF	I _R ≥10000MΩ	C≤25nF		I _R ≥4000MΩ	
		C•10nF	I _R >500Ω.F	C•25nF		C×R>100ΩF	
Dielectric With Standing Voltage		There shall be no evidence of damage or flash over during the test.					
Termination adhesion strength		There shall be no evidence of damage or flash over during the test.					
Bending Strength		There shall be no evidence of damage or flash over during the test, capacitance tolerance shall be not more than 10%.					
Solderability	Time:	2±1s					
	Temp.:	235±5•					
	Cover:	≥ 95%					
Resistance to Soldering Heat	Time:	5±1s					
	Temp.:	265±5•					
	Cover:	≥ 95%					
	•C/C:	≤0.5% or 0.5pF		≤-5% ~ +10%		≤-10% ~ +20%	
Temperature cycling	•C/C:	≤1%		≤± 10%		≤±30%	
Outlook:		There shall be no evidence of damage or flash over during the test.					
Humidity Moisture Resistance	•C/C:	≤2%		≤10%		≤20%	
	DF	0.003		0.05		0.07	
	IR	R×C>25s					
	Outlook:	There shall be no evidence of damage or flash over during the test.					
T.C. Characteristics (•C/C)		±30ppm/•		±15%		Z5U(E)	+22~-56%
						Y5V(F)	+22~-82%
Vibration	Outlook:	There shall be no evidence of damage or flash over during the test.					

Bump	•C/C:	≤2%		
	Outlook:	There shall be no evidence of damage or flash over during the test.		
Life test (1000hours)	•C/C:	≤2%	≤±12.5%	≤±30.0%
	DF	0.003		0.05
	IR	R×C>25s		R×C≥25s
	Outlook:	There shall be no evidence of damage or flash over during the test.		

How to order

VCMR 104 M 050 Y 02 B

(1) (2) (3) (4) (5) (6) (7)

(1)Product Type:

VCMR=RADIAL TYPE

VCMA=AXIAL TYPE

(2)Capacitance:

105=10*10⁵ =1000000pF

104=10*10⁴ =100000pF

(3)Tolerance:

Z=+80%/-20%

M=±20%

K=±10%

J=±5%

(4)WORKING VOLTAGE:

050=50VDC

016=16VDC

(5)TEMPERATURE

CHARACTERISTIC:

C: COG(NPO)

X: X7R

Z: Z5U

Y: Y5V

(5)Lead Space:

01=2.54mm

02=5.08mm

00=AXIAL

(7)Packing:

B=Bulk

T=TAPE

A=AMMO

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