

Vishay Cera-Mite

Lower Voltage Ceramic DC Disc Capacitors 1000 V_{DC} Precision Capacitors



QUICK REFERENCE DATA							
DESCRIPTION	VALUE						
Ceramic Class			1				
Ceramic Dielectric	COK COG U2J M3F			МЗК	S3N		
Voltage (V _{DC})	1000						
Min. Capacitance (pF)	1.0	3.0	33	560	680		
Max. Capacitance (pF)	2.7	270	68	560	680		
Mounting	Radial						

INSULATION RESISTANCE

Min. 1000 ΩF or 50 000 $M\Omega$

TOLERANCE ON CAPACITANCE

±5%

DISSIPATION FACTOR

0.1 % max. at 1 MHz; 1 V

CATEGORY TEMPERATURE RANGE

(-55 to +125) °C

CLIMATIC CATEGORY ACC. TO EN 60068-1

55/125/21

OPERATING TEMPERATURE RANGE

(-55 to +105) °C

FEATURES

- Ultra stable over temperature and voltage
- Used when the ultimate in stability is required



- Radial leads
- · Ceramic singlelayer capacitor
- Material categorization: for definitions of compliance please see <u>www.vishav.com/doc?99912</u>

APPLICATIONS

- Temperature compensating
- · Resonant circuit

DESIGN

The capacitors consist of a ceramic disc of which both sides are silver-plated. Connection leads are made of tinned copper or tinned copper clad steel having diameters of 0.020" (0.51 mm) or 0.025" (0.64 mm).

The capacitors may be supplied with radial kinked or straight leads having lead spacing of 0.250" (6.35 mm) or 0.375" (9.5 mm).

Coating is made of flame retardant epoxy resin in accordance with "UL 94 V-0".

CAPACITANCE RANGE

1.0 pF to 680 pF

RATED VOLTAGE

1000 V_{DC}

DIELECTRIC STRENGTH BETWEEN LEADS

Component test:

 $2500 V_{DC}$, 2 s

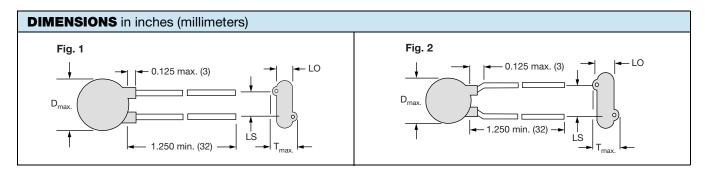
CERAMIC DIELECTRIC

C0K, C0G, U2J, M3K, S3N (Class 1)

ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishav.com/doc?91000



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ORE	ORDERING INFORMATION, CERAMIC 1000 V _{DC} PRECISION CAPACITORS								
С	TOL	D _{max.} Diameter Thickness LS LO LEAD SPACE LEAD OFFS INCH (mm)		LO LEAD OFFSET	WIRE SIZE		FIG	ORDERING	
(pF)	TOL.	INCH (mm)	INCH (mm)	INCH (mm) ± 1 mm	INCH (mm) ± 0.5 mm	AWG	INCH (mm)	FIG.	CODE
COK (P100)						•		
1.0		0.250 (6.4)	0.156 (4.0)	0.250 (6.4)	0.098 (2.5)	24	0.020 (0.51)	2	561R10TCCV10
2.2	± 0.5 pF				0.051 (1.3)				561R10TCCV22
2.7					0.043 (1.1)				561R10TCCV27
COG ((NP0)	ı	T	ı	T	1	T		
3.0			0.156 (4.0) 0.156 (4.0)	0.250 (6.4) 0.250 (6.4)	0.063 (1.6)		0.020 (0.51)	2	561R10TCCV30
3.3					0.055 (1.4)				561R10TCCV33
3.9					0.055 (1.4)	4			561R10TCCV39
4.7	± 0.5 pF				0.043 (1.1)				561R10TCCV47
5.0		0.050 (0.4)			0.043 (1.1)	4			561R10TCCV50
5.6		0.250 (6.4)			0.039 (1.0)				561R10TCCV56
6.8					0.047 (1.2)				561R10TCCV68
8.2					0.043 (1.1)	24			561R10TCCV82
10					0.051 (1.3)	1			561R10TCCQ10
12					0.043 (1.1)	1			561R10TCCQ12
15					0.039 (1.0)	1			561R10TCCQ15
18					0.043 (1.1)				561R10TCCQ18
20					0.039 (1.0)				561R10TCCQ20
25					0.039 (1.0) 0.035 (0.9)				561R10TCCQ22 561R10TCCQ25
27		0.370 (9.4)	0.156 (4.0)	0.250 (6.4)	0.035 (0.9)				561R10TCCQ25
30					0.047 (1.2)				561R10TCCQ27
33					0.037 (1.3)				561R10TCCQ33
39					0.047 (1.2)				561R10TCCQ39
47	±5%	0.440 (11.2)	0.156 (4.0)	0.250 (6.4)	0.051 (1.3)	1		1	561R10TCCQ47
50					0.047 (1.2)				561R10TCCQ50
56		0.440 (11.2)			0.047 (1.2)				561R10TCCQ56
68		0.490 (12.4)	0.156 (4.0)	0.250 (6.4)	0.047 (1.2)	22			561R10TCCQ68
82		0.490 (12.4)	0.156 (4.0)	0.375 (9.5)	0.043 (1.1)	1			561R10TCCQ82
100		, ,	, ,	, ,	0.047 (1.2)	1			561R10TCCT10
120		0.560 (14.2)	0.156 (4.0)	0.375 (9.5)	0.047 (1.2)	-			561R10TCCT12
150		0.630 (16.0)	0.156 (4.0)	0.375 (9.5)	0.043 (1.1)				561R10TCCT15
180		0.680 (17.3)	0.156 (4.0)	0.375 (9.5)	0.043 (1.1)	1			561R10TCCT18
220		0.760 (19.3)	0.156 (4.0)	0.375 (9.5)	0.043 (1.1)	1			561R10TCCT22
270		0.890 (22.6)	0.156 (4.0)	0.375 (9.5)	0.047 (1.2)	1			561R10TCCT27
U2J (N750)	. , ,		. , ,	. , ,				
33		0.290 (7.4)	0.156 (4.0)	0.250 (6.4)	0.039 (1.0)	24	0.020 (0.51)	0	561R10TCUQ33
68	± 5 %	0.370 (9.4)	0.156 (4.0)	0.250 (6.4)	0.039 (1.0)	22	0.025 (0.64)	2	561R10TCUQ68
МЗК	(N1000)								
560	±5%	0.560 (14.2)	0.156 (4.0)	0.375 (9.5)	0.039 (1.0)	22	0.025 (0.64)	1	561R10TCUT56
•	N3300)								
680	±5%	0.630 (16.0)	0.156 (4.0)	0.375 (9.5)	0.047 (1.2)	22	0.025 (0.64)	1	561R10TCUT68

RELATED DOCUMENTS	
General Information	www.vishay.com/doc?23140

Revision: 02-Mar-15 2 Document Number: 23108



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