

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


RoHS
COMPLIANT

FEATURES

- Ultra stable over temperature and voltage
- Used when ultimate stability is required
- Radial leads
- Ceramic singlelayer capacitor
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

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".

QUICK REFERENCE DATA			
DESCRIPTION	VALUE		
Ceramic Class	1		
Ceramic Dielectric	C0K	C0G	U2J
Voltage (V _{DC})	1000		
Min. Capacitance (pF)	1.0	3.0	33
Max. Capacitance (pF)	2.7	270	680
Mounting	Radial		

INSULATION RESISTANCE

Min. 1000 ΩF or 50 000 MΩ

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

CAPACITANCE RANGE

1.0 pF to 680 pF

RATED VOLTAGE

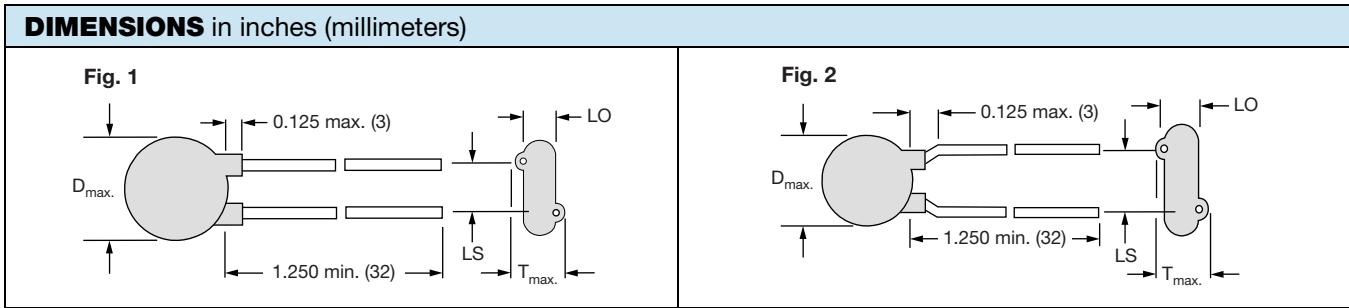
 1000 V_{DC}
DIELECTRIC STRENGTH BETWEEN LEADS

Component test:

 2500 V_{DC}, 2 s

CERAMIC DIELECTRIC

C0K, C0G, U2J (class 1)



ORDERING INFORMATION, CERAMIC 1000 V_{DC} PRECISION CAPACITORS															
C (pF)	TOL.	D _{max.} DIAMETER INCH (mm)	T _{max.} THICKNESS INCH (mm)	LS LEAD SPACE INCH (mm) ± 1 mm	LO LEAD OFFSET INCH (mm) ± 0.5 mm	WIRE SIZE		FIG.	ORDERING CODE						
						AWG	INCH (mm)								
C0K (P100)															
1.0	± 0.5 pF	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					0.051 (1.3)				561R10TCCV22						
2.7					0.043 (1.1)				561R10TCCV27						
C0G (NPO)															
3.0	± 0.5 pF	0.250 (6.4)	0.156 (4.0)	0.250 (6.4)	0.063 (1.6)	24	0.020 (0.51)	2	561R10TCCV30						
3.3					0.055 (1.4)				561R10TCCV33						
3.9					0.055 (1.4)				561R10TCCV39						
4.7					0.043 (1.1)				561R10TCCV47						
5.0					0.043 (1.1)				561R10TCCV50						
5.6					0.039 (1.0)				561R10TCCV56						
6.8					0.047 (1.2)				561R10TCCV68						
8.2					0.043 (1.1)				561R10TCCV82						
10					0.051 (1.3)				561R10TCCQ10						
12					0.043 (1.1)				561R10TCCQ12						
15					0.039 (1.0)				561R10TCCQ15						
18					0.043 (1.1)				561R10TCCQ18						
20					0.039 (1.0)				561R10TCCQ20						
22					0.039 (1.0)				561R10TCCQ22						
25					0.035 (0.9)				561R10TCCQ25						
27	0.047 (1.2)	561R10TCCQ27													
30	0.051 (1.3)	561R10TCCQ30													
33	0.047 (1.2)	561R10TCCQ33													
39	0.043 (1.1)	561R10TCCQ39													
47	0.051 (1.3)	561R10TCCQ47													
50	± 5 %	0.440 (11.2)	0.156 (4.0)	0.250 (6.4)	0.047 (1.2)	22	0.025 (0.64)	1	561R10TCCQ50						
56					0.047 (1.2)				561R10TCCQ56						
68					0.490 (12.4)				0.156 (4.0)	0.250 (6.4)	0.047 (1.2)	561R10TCCQ68			
82					0.490 (12.4)				0.156 (4.0)	0.375 (9.5)	0.043 (1.1)	561R10TCCQ82			
100					0.560 (14.2)				0.156 (4.0)	0.375 (9.5)	0.047 (1.2)	561R10TCCT10			
120											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)	561R10TCCT18
220					0.760 (19.3)				0.156 (4.0)	0.375 (9.5)	0.043 (1.1)	561R10TCCT22			
270					0.890 (22.6)				0.156 (4.0)	0.375 (9.5)	0.047 (1.2)	561R10TCCT27			
U2J (N750)															
33	± 5 %	0.290 (7.4)	0.156 (4.0)	0.250 (6.4)	0.039 (1.0)	24	0.020 (0.51)	2	561R10TCUQ33						
68		0.370 (9.4)	0.156 (4.0)	0.250 (6.4)	0.039 (1.0)	22	0.025 (0.64)	2	561R10TCUQ68						
560		0.650 (16.5)	0.156 (4.0)	0.375 (9.5)	0.039 (1.0)	22	0.025 (0.64)	1	561R10TCUT56						
680		0.710 (18.0)	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



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Ceramic Disc Capacitors](#) category:

Click to view products by [Vishay](#) manufacturer:

Other Similar products are found below :

[5AU100JCECA](#) [5AU220JCGCA](#) [5AU560JCJCA](#) [DEF2CLH020CA3B](#) [NCD102K100Y5PTRF](#) [NCD103M500Z5UF](#) [DEF2CLH030CJ3B](#)
[101GHR102K](#) [NCD101K1KVY5FF](#) [NCD103M1KVZ5UF](#) [DEF2CLH040CN3A](#) [DEF2CLH080DA3B](#) [564R3DF0T22](#) [C1210N561J102T](#)
[CD70ZU2GA102MYAKA](#) [8903D0](#) [90410-10](#) [0838-040-X7R0-220K](#) [SL102101J060BAND5P](#) [JN102MQ35FAAAAKPLP](#) [0841-040-X5U0-](#)
[103M](#) [ZU501103M090B20C6P](#) [SL102181J070HAND5P](#) [SL102151J070HAND5P](#) [ZU501102M050B20C6P](#) [SL500180J040B20C2P](#)
[ZU102103M100B20C0P](#) [F121K25S3NN63J5R](#) [F121K25S3NP63K7R](#) [F121K25S3NR63K7R](#) [F122K47S3NP63K7R](#) [F151K29S3NR63K7R](#)
[F222K47S3NN63J7R](#) [F681K43S3NR63K7R](#) [HVCC103Y6P152MEAX](#) [F681K29S3NN63J5R](#) [S103Z43Y5VN6TJ5R](#)
[TCC0805X7R472K501FT](#) [C947U392MZVDBA7317](#) [CCK-100N](#) [CCK-22N](#) [CCK-2P2](#) [CCK-4P7](#) [RDE5C1H102J0ZAH03P](#) [CCK-220P](#)
[564R30GAD10KA](#) [25YD22-R](#) [DEJF3E2472ZB3B](#) [DEA1X3F390JC3B](#) [DEA1X3F150JP3A](#)