Ceramic Singlelayer DC Disc Capacitors, 6 kV_{DC} General Purpose

QUICK REFERENCE DATA		
DESCRIPTION	VALUE	
Ceramic Class	1	2
Ceramic Dielectric	N750, Y5T, Y5U	
Voltage (V_{DC})	6000	
Min. Capacitance (pF)	10	56
Max. Capacitance (pF)	330	6800
Mounting	Radial	

MARKING

Marking indicates, capacitance, tolerance code, and rated voltage.

OPERATING TEMPERATURE RANGE

-40 °C to +85 °C

TEMPERATURE CHARACTERISTICS

Class 1 N750 (U2J)

Class 2 Y5T, Y5U

SECTIONAL SPECIFICATIONS

Climatic category (according to EN 60068-1): 40/085/21

FEATURES

- High capacitance in small sizes
- Low losses
- Wide range of different lead styles
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

RoHS COMPLIANT

APPLICATIONS

- Lighting ballasts
- SMPS

DESIGN

The capacitors consist of a ceramic disc which is silver plated on both sides. Connection leads are made of tinned copper having diameters of 0.6 mm or 0.8 mm.

The capacitors may be supplied with straight or kinked leads having a lead spacing of 12.5 mm.

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

CAPACITANCE RANGE

10 pF to 6.8 nF

RATED VOLTAGE

6 kV_{DC}

DIELECTRIC STRENGTH

9000 V_{DC}, 2 s Component test

INSULATION RESISTANCE AT 500 V_{DC}

≥ 10 000 MΩ (60 s)

TOLERANCE ON CAPACITANCE

± 10 %, ± 20 %

DISSIPATION FACTOR

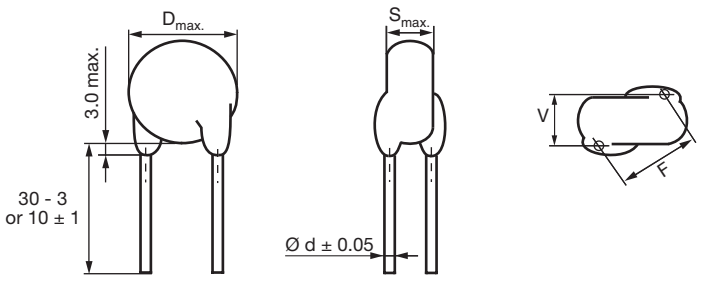
Class 1:

C < 30 pF: $\left(\frac{100\ pF}{C} + 0.7\right) \times 10^{-4}$ max. (1 MHz)

C ≥ 30 pF: max. 0.1 % (1 MHz)

Class 2: max. 2.5 % (1 kHz)

DIMENSIONS in millimeters



ORDERING INFORMATION

CAPACITANCE (pF)	TOLERANCE (%)	BODY DIAMETER $D_{max.}$ (mm)	BODY THICKNESS $S_{max.}$ (mm)	LEAD SPACING (1) F (mm) ± 1 mm	LEAD DIAMETER (1) d (mm) ± 0.05 mm	WIDTH (1) V (mm) ± 0.5 mm	ORDERING CODE MISSING DIGITS SEE ORDERING CODE BELOW
N750 (U2J)							
10	± 10	7.0	4.8	12.5	0.6	2.2	HFU100KBF###KR
15							HFU150KBF###KR
22							HFU220KBF###KR
33		9.5					HFU330KBF###KR
47							HFU470KBF###KR
68		12.0	5.2		0.8	2.4	HFU680KBF###KR
82							HFU820KBF###KR
100							HFU101KBF###KR
150		15.0					HFU151KBF###KR
220		17.0					HFU221KBF###KR
330		20.0					HFU331KBF###KR
Y5T (2E3)							
56	± 20 (2)	7.0	5.0	12.5	0.6	3.5	HFZ560#BF###KR
68							HFZ680#BF###KR
82							HFZ820#BF###KR
100		8.0					HFZ101#BF###KR
120							HFZ121#BF###KR
150							HFZ151#BF###KR
180		10.0					HFZ181#BF###KR
220							HFZ221#BF###KR
270							HFZ271#BF###KR
330							HFZ331#BF###KR
390		12.0					HFZ391#BF###KR
470							HFZ471#BF###KR
560		13.0					HFZ561#BF###KR
680		15.0					HFZ681#BF###KR
820							HFZ821#BF###KR
1000		17.0			0.8		HFZ102#BF###KR
1200		19.0					HFZ122#BF###KR
1500		21.0					HFZ152#BF###KR
1800							HFZ182#BF###KR
2200		25.0					HFZ222#BF###KR
2700							HFZ272#BF###KR

ORDERING INFORMATION

CAPACITANCE (pF)	TOLERANCE (%)	BODY DIAMETER $D_{max.}$ (mm)	BODY THICKNESS $S_{max.}$ (mm)	LEAD SPACING (1) F (mm) ± 1 mm	LEAD DIAMETER (1) d (mm) ± 0.05 mm	WIDTH (1) V (mm) ± 0.5 mm	ORDERING CODE MISSING DIGITS SEE ORDERING CODE BELOW
Y5U (2E3)							
150	± 20	7.0	5.0	12.5	0.6	3.5	HFE151MBF###KR
220							HFE221MBF###KR
330		9.0					HFE331MBF###KR
470							HFE471MBF###KR
680							HFE681MBF###KR
1000		11.0	5.5				HFE102MBF###KR
1500		13.0					HFE152MBF###KR
2200		15.0					HFE222MBF###KR
3300		21.0			0.8		HFE332MBF###KR
4700							HFE472MBF###KR
6800		23.0					HFE682MBF###KR

Notes

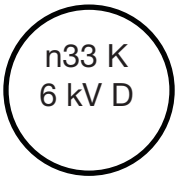
(1) Standard lead configuration, other lead spacing and diameter available on request

(2) ± 10 % available on request

ORDERING CODE

#	7th digit	Capacitance tolerance	± 10 % = K, ± 20 % = M				
###	10th to 12th digit	Lead configuration	see "General Information"				
Example	**HFE**	**682**	**M**	**BF**	**EF0**	**K**	**R**
	Series	Capacitance value	Tolerance code	Voltage code	Lead configuration	Internal code	RoHS compliant

MARKING



HFU 10 pF to 100 pF
HFZ 56 pF to 470 pF
HFE 150 pF to 1.0 nF

HFU 150 pF to 330 pF
HFZ 560 nF to 2.7 nF
HFE 1.5 nF to 6.8 nF

RELATED DOCUMENTS

General Information	www.vishay.com/doc?22001

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