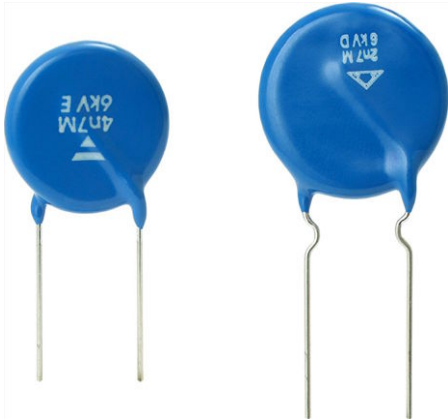


Ceramic Singlelayer DC Disc Capacitors, 6 kV_{DC} General Purpose



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 %

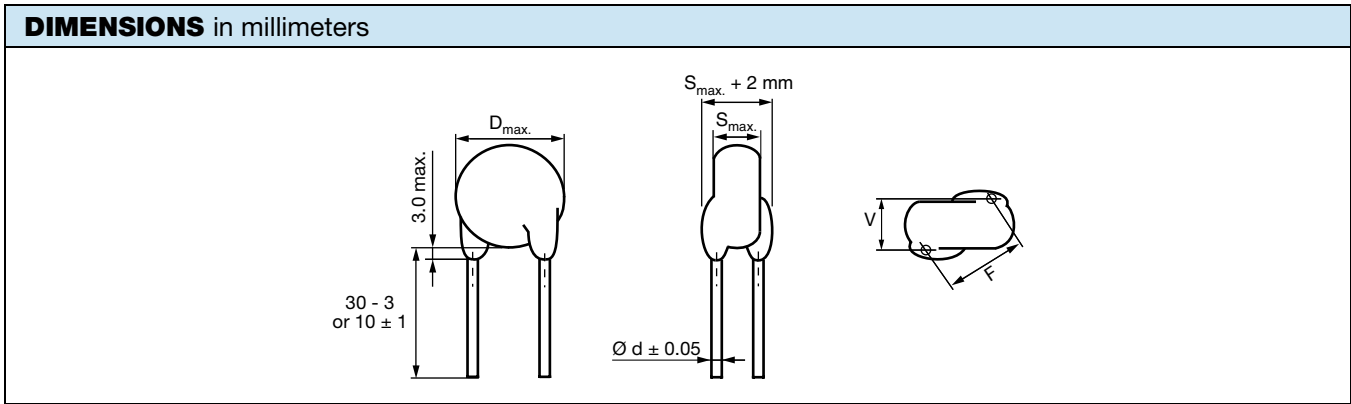
DISSIPATION FACTOR

Class 1:

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

$C \geq 30 \text{ pF: } \text{max. 0.1 \% (1 MHz)}$

Class 2: max. 2.5 % (1 kHz)



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							HFU330KBF###KR
47		HFU470KBF###KR					
68		5.2	0.8				2.4
82					HFU820KBF###KR		
100					HFU101KBF###KR		
150					HFU151KBF###KR		
220					HFU221KBF###KR		
330					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							HFZ101#BF###KR
120		8.0					HFZ121#BF###KR
150							HFZ151#BF###KR
180							HFZ181#BF###KR
220							HFZ221#BF###KR
270		10.0					HFZ271#BF###KR
330							HFZ331#BF###KR
390							HFZ391#BF###KR
470							HFZ471#BF###KR
560		13.0			HFZ561#BF###KR		
680					HFZ681#BF###KR		
820					HFZ821#BF###KR		
1000					HFZ102#BF###KR		
1200					HFZ122#BF###KR		
1500					HFZ152#BF###KR		
1800					HFZ182#BF###KR		
2200					HFZ222#BF###KR		
2700	25.0	HFZ272#BF###KR					
				0.8			



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							HFE331MBF###KR				
470		HFE471MBF###KR									
680		HFE681MBF###KR									
1000		HFE102MBF###KR									
1500		HFE152MBF###KR									
2200		HFE222MBF###KR									
3300		HFE332MBF###KR									
4700		HFE472MBF###KR									
6800		HFE682MBF###KR									
			9.0		5.5		0.8				

Notes

- ⁽¹⁾ Standard lead configuration, other lead spacing and diameter available on request
- ⁽²⁾ ± 10 % available on request

ORDERING CODE							
#	7 th digit	Capacitance tolerance	± 10 % = K, ± 20 % = M				
###	10 th to 12 th 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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