

Ceramic Singlелayer DC Disc Capacitors, 5 kV_{DC} General Purpose



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

22 pF to 2.2 nF

RATED VOLTAGE

5 kV_{DC}

DIELECTRIC STRENGTH

7500 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 ≥ 30 pF: max. 0.1 % (1 MHz)

Class 2: max. 2.5 % (1 kHz)

QUICK REFERENCE DATA		
DESCRIPTION	VALUE	
Ceramic Class	1	2
Ceramic Dielectric	N750, Y5U	
Voltage (V _{DC})	5000	
Min. Capacitance (pF)	22	220
Max. Capacitance (pF)	330	2200
Mounting	Radial	

MARKING

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

OPERATING TEMPERATURE RANGE

-40 °C to +85 °C

TEMPERATURE CHARACTERISTICS

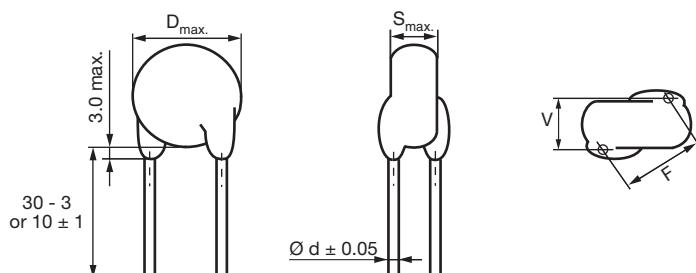
Class 1 N750 (U2J)

Class 2 Y5U

SECTIONAL SPECIFICATIONS

Climatic category (according to EN 60068-1):

40/085/21

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)														
22	± 10	7.0	4.8	12.5	0.6	2.2	HEU220KBE###KR							
33							HEU330KBE###KR							
47		9.3			0.8	1.9	HEU470KBE###KR							
68		5.2					HEU680KBE###KR							
82							11.8					HEU820KBE###KR		
100												HEU101KBE###KR		
150							14.4	HEU151KBE###KR						
220							16.3	HEU221KBE###KR						
330							19.5	HEU331KBE###KR						
Y5U (2E3)														
220	± 20 ⁽²⁾	7.0	5.0	12.5	0.6	3.8	HEE221#BE###KR							
330							HEE331#BE###KR							
680		9.0			0.8		HEE681#BE###KR							
1000							HEE102#BE###KR							
1500		11.0					HEE152#BE###KR							
2200							HEE222#BE###KR							

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	HEE	222 M BE EJ0 K R	
	Series	Capacitance value	Tolerance code
			Voltage code
			Lead configuration
			Internal code
			RoHS compliant

MARKING

HEU 22 pF to 100 pF
HEE 220 pF to 1.0 nF

HEU 150 pF to 330 pF
HEE 1.5 nF to 2.2 nF

RELATED DOCUMENTS

General Information

www.vishay.com/doc?22001

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