Ceramic Singlelayer DC Disc Capacitors, 1 kV_{DC} General Purpose

QUICK REFERENCE DATA		
DESCRIPTION	VALUE	
Ceramic Class	1	2
Ceramic Dielectric	N750, Y5T, Y5U, Y5V	
Voltage (V_{DC})	1000	
Min. Capacitance (pF)	10	47
Max. Capacitance (pF)	680	22 000
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, Y5V

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 5.0 mm or 7.5 mm.

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

CAPACITANCE RANGE

10 pF to 22 nF

RATED VOLTAGE

1 kV_{DC}

DIELECTRIC STRENGTH

1750 kV_{DC}, 2 s Component test

INSULATION RESISTANCE AT 500 V_{DC}

≥ 10 000 MΩ (60 s)

TOLERANCE ON CAPACITANCE

± 10 %, ± 20 %, -20 % +50 %

DISSIPATION FACTOR

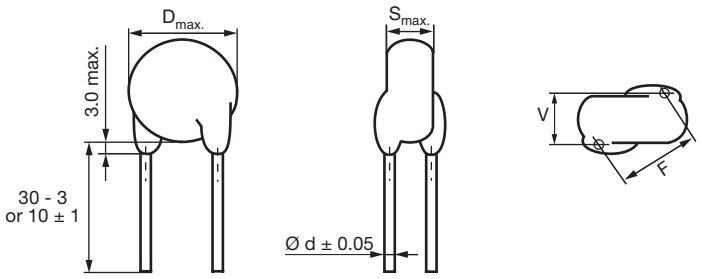
Class 1:

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	3.0	7.5	0.6	1.4	HAU100KBA###KR
15							HAU150KBA###KR
22							HAU220KBA###KR
33		8.0					HAU330KBA###KR
47							HAU470KBA###KR
68							HAU680KBA###KR
82							HAU820KBA###KR
100							HAU101KBA###KR
150		10.0	3.5				HAU151KBA###KR
220		11.0					HAU221KBA###KR
330		12.5					HAU331KBA###KR
470		14.5					HAU471KBA###KR
560		16.5					HAU561KBA###KR
680		18.0					HAU681KBA###KR
Y5T (2D3)							
47	± 10, ± 20	7.0	3.0	5.0	0.6	1.2	HAZ470#BA###KR
56							HAZ560#BA###KR
68							HAZ680#BA###KR
82							HAZ820#BA###KR
100							HAZ101#BA###KR
150							HAZ151#BA###KR
220							HAZ221#BA###KR
330							HAZ331#BA###KR
470							HAZ471#BA###KR
680							HAZ681#BA###KR
1000		9.0					HAZ102#BA###KR
1500							HAZ152#BA###KR
2200		11.0					HAZ222#BA###KR
3300		13.0		7.5			HAZ332#BA###KR
4700		15.0					HAZ472#BA###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)							
1000	± 20	7.0	3.0	5.0	0.6	1.2	HAE102MBA###KR
1500		9.0					HAE152MBA###KR
2200							HAE222MBA###KR
3300		11.0					HAE332MBA###KR
4700							HAE472MBA###KR
6800		13.0		7.5			HAE682MBA###KR
10 000		15.0					HAE103MBA###KR
Y5V (2F3)							
2200	- 20 / + 50 (2)	7.0	3.0	5.0	0.6	1.2	HAX222#BA###KR
3300		9.0					HAX332#BA###KR
4700							HAX472#BA###KR
6800		12.0		7.5			HAX682#BA###KR
10 000							HAX103#BA###KR
15 000		17.0					HAX153#BA###KR
22 000		18.0					HAX223#BA###KR

Notes

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

(2) ± 20 % available on request

ORDERING CODE

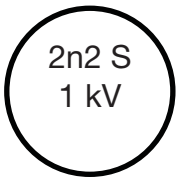
#	7th digit	Capacitance tolerance	± 10 % = K, ± 20 % = M, - 20 % / + 50 % = S
###	10th to 12th digit	Lead configuration	see “General Information”

Example	HAU	101	K	BA	BFG	K	R
	Series	Capacitance value	Tolerance code	Voltage code	Lead configuration	Internal code	RoHS compliant

MARKING

HAU 10 pF to 330 pF
HAZ 47 pF to 2.2 nF
HAE 1.0 nF to 4.7 nF

HAU 470 pF to 680 pF
HAZ 3.3 nF to 4.7 pF
HAE 6.8 nF to 10 nF



HAX 2.2 nF to 6.8 nF

HAX 10 nF to 22 nF

RELATED DOCUMENTS

General Information	www.vishay.com/doc?22001

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