Ceramic Singlelayer DC Disc Capacitors, 8 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

Pb e3 RoHS COMPLIANT

APPLICATIONS

- Lighting ballasts
- SMPS

QUICK REFERENCE DATA	
DESCRIPTION	**VALUE**
Ceramic Class	2
Ceramic Dielectric	Y5T
Voltage (V_{DC})	8000
Min. Capacitance (pF)	100
Max. Capacitance (pF)	2200
Mounting	Radial

MARKING

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

OPERATING TEMPERATURE RANGE

-40 °C to +85 °C

TEMPERATURE CHARACTERISTICS

Y5T

SECTIONAL SPECIFICATIONS

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

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

100 pF to 2.2 nF

RATED VOLTAGE

8 kV_{DC}

DIELECTRIC STRENGTH

12 000 V_{DC}, 2 s Component test

INSULATION RESISTANCE AT 500 V_{DC}

≥ 10 000 MΩ (60 s)

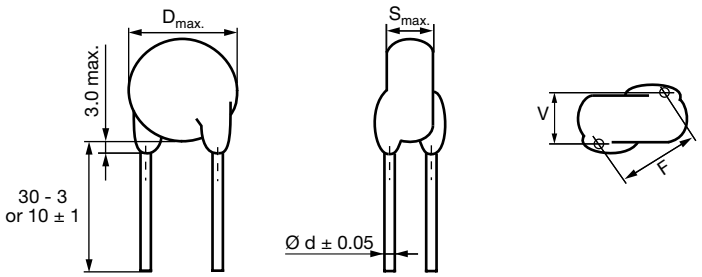
TOLERANCE ON CAPACITANCE

± 20 % (± 10 % available on request)

DISSIPATION FACTOR

Max. 2.0 % (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
Y5T (2D3)							
100	± 20 (2)	9.0	8.3	12.5	0.8	4.0	HGZ101#BP###KR
120							HGZ121#BP###KR
150							HGZ151#BP###KR
180		11.0					HGZ181#BP###KR
220							HGZ221#BP###KR
270							HGZ271#BP###KR
330		13.0					HGZ331#BP###KR
390							HGZ391#BP###KR
470		14.0					HGZ471#BP###KR
560		16.0					HGZ561#BP###KR
680							HGZ681#BP###KR
820		18.0					HGZ821#BP###KR
1000							HGZ102#BP###KR
1200		21.0					HGZ122#BP###KR
1500							HGZ152#BP###KR
1800		24.0					HGZ182#BP###KR
2200							HGZ222#BP###KR

Notes

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

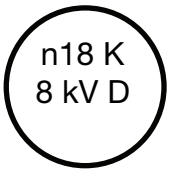
(2) ± 10 % available on request

ORDERING CODE

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

Example	HGZ	821	M	BP	ERY	K	R
	Series	Capacitance value	Tolerance code	Voltage code	Lead configuration	Internal code	RoHS compliant

MARKING



HGZ 100 pF to 270 pF

HGZ 330 pF to 2.2 nF

RELATED DOCUMENTS

General Information	www.vishay.com/doc?22001

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.