

High Voltage Ceramic Singlelayer DC Disc Capacitors, Class 2, Low Loss (0.5 %), 15 kV_{DC}


RoHS
COMPLIANT

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

APPLICATIONS

In electronic circuits where low losses and high capacitance per volume are essential, for example:

- SMPS
- DC and pulse high voltage
- X-ray and laser equipment

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 0.8 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.

QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Ceramic Class	2
Ceramic Dielectric	Y5T
Voltage (V _{DC})	15 000
Min. Capacitance (pF)	100
Max. Capacitance (pF)	1500
Mounting	Radial

MARKING

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

OPERATING TEMPERATURE RANGE

-40 °C to +125 °C

TEMPERATURE CHARACTERISTICS

Y5T (2D3)

SECTIONAL SPECIFICATIONS

Climatic category (according to EN 60068-1):
40/125/21

CAPACITANCE RANGE

100 pF to 1.5 nF

RATED VOLTAGE

15 kV_{DC}

DIELECTRIC STRENGTH

22 500 V_{DC}, 2 s Component test

INSULATION RESISTANCE AT 500 V_{DC}

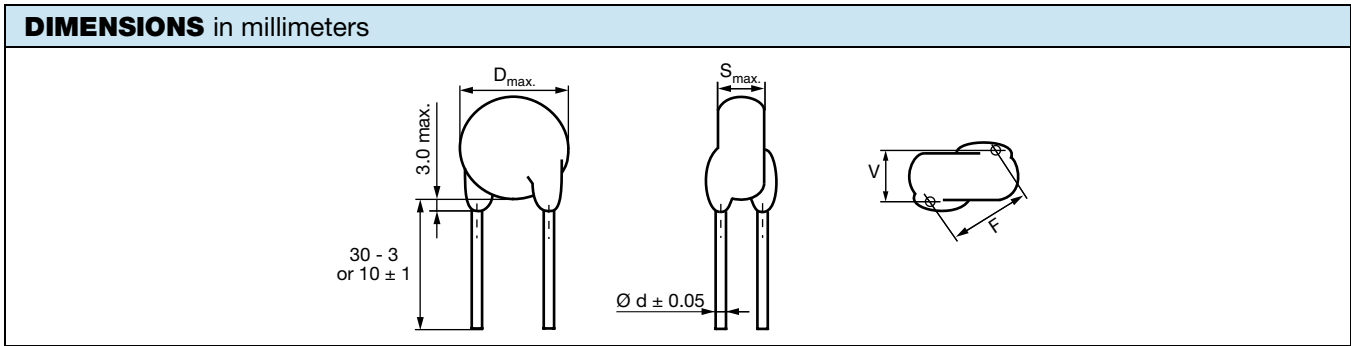
≥ 100 000 MΩ (60 s)

TOLERANCE ON CAPACITANCE

± 20 % (± 10 % available on request)

DISSIPATION FACTOR

Max. 0.5 % (1 kHz)

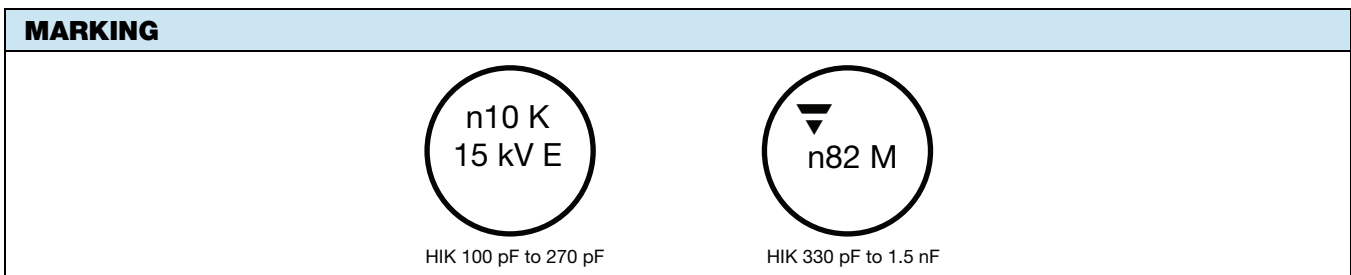


ORDERING INFORMATION							
CAPACITANCE (pF)	TOLERANCE (%)	BODY DIAMETER D _{max.} (mm)	BODY THICKNESS S _{max.} (mm)	LEAD SPACING ⁽¹⁾ F (mm) ± 1 mm	LEAD DIAMETER ⁽¹⁾ d (mm) ± 0.05 mm	WIDTH ⁽¹⁾ V (mm) ± 0.5 mm	ORDERING CODE MISSING DIGITS SEE ORDERING CODE BELOW
100	± 20 ⁽²⁾	8.0	8.0	12.5	0.8	5.0	HIK101#BJ###KR
120		9.0					HIK121#BJ###KR
150		9.0					HIK151#BJ###KR
180		10.0				5.2	HIK181#BJ###KR
220		11.0					HIK221#BJ###KR
270		11.5					HIK271#BJ###KR
330		13.0	8.4			HIK331#BJ###KR	
390		13.0				HIK391#BJ###KR	
470		15.0				5.4	HIK471#BJ###KR
560		16.0					HIK561#BJ###KR
680		18.5					HIK681#BJ###KR
820		20.0				5.6	HIK821#BJ###KR
1000		20.0	HIK102#BJ###KR				
1200		24.0	5.8				HIK122#BJ###KR
1500		24.0				HIK152#BJ###KR	

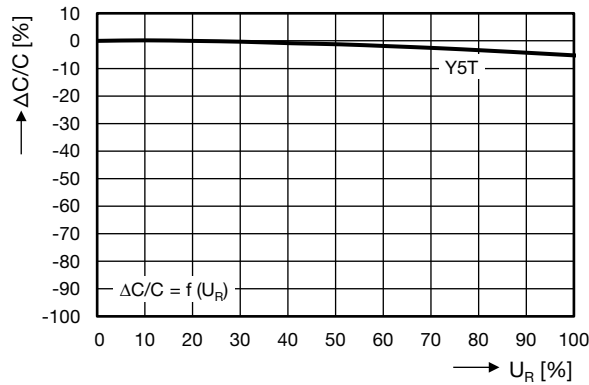
Notes

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

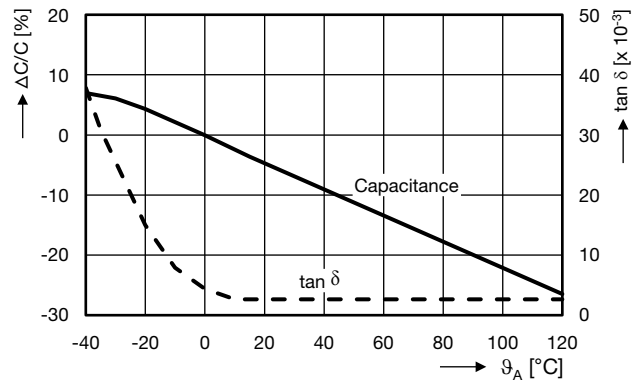
ORDERING CODE							
#	7 th digit	Capacitance tolerance	± 10 % = K, ± 20 % = M				
###	10 th to 12 th digit	Lead configuration	see "General Information"				
Example	HIK	152	M	BJ	EHO	K	R
	Series	Capacitance value	Tolerance code	Voltage code	Lead configuration	Internal code	RoHS compliant



CAPACITANCE CHANGE VS. VOLTAGE (Typical)



CAPACITANCE CHANGE AND DISSIPATION FACTOR VS. TEMPERATURE (Typical)



RELATED DOCUMENTS

General Information

www.vishay.com/doc?22001



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