

## Ceramic Singlelayer DC Disc Capacitors, 8 kV<sub>DC</sub> General Purpose



QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Ceramic Class	2
Ceramic Dielectric	Y5T
Voltage (V <sub>DC</sub> )	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

### 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](http://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

100 pF to 2.2 nF

### RATED VOLTAGE

8 kV<sub>DC</sub>

### DIELECTRIC STRENGTH

12 000 V<sub>DC</sub>, 2 s Component test

### INSULATION RESISTANCE AT 500 V<sub>DC</sub>

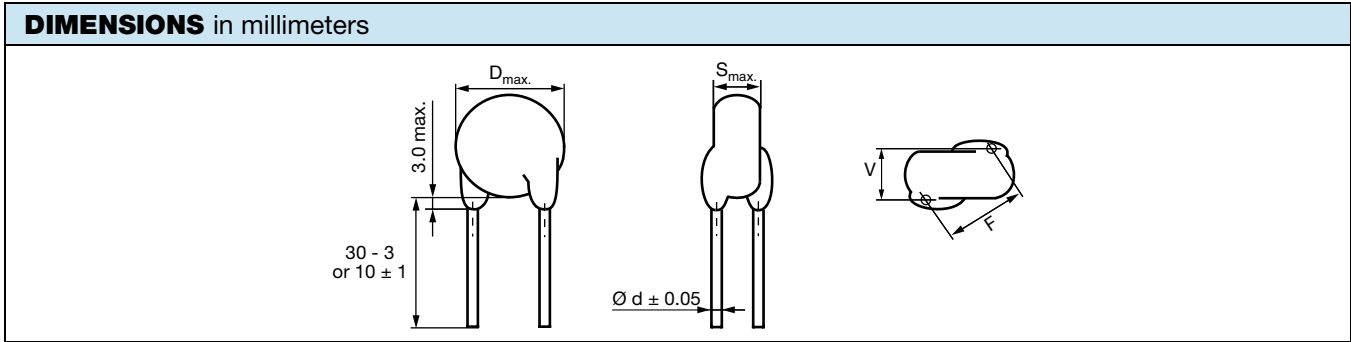
≥ 10 000 MΩ (60 s)

### TOLERANCE ON CAPACITANCE

± 20 % (± 10 % available on request)

### DISSIPATION FACTOR

Max. 2.0 % (1 kHz)

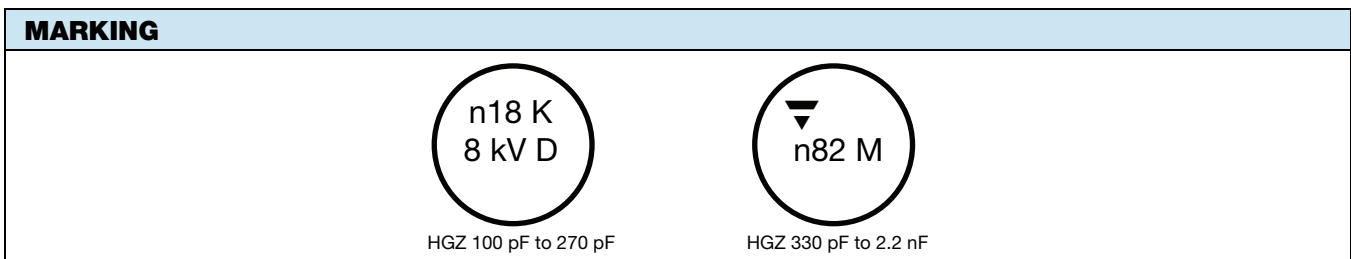


ORDERING INFORMATION							
CAPACITANCE (pF)	TOLERANCE (%)	BODY DIAMETER D <sub>max.</sub> (mm)	BODY THICKNESS S <sub>max.</sub> (mm)	LEAD SPACING <sup>(1)</sup> F (mm) ± 1 mm	LEAD DIAMETER <sup>(1)</sup> d (mm) ± 0.05 mm	WIDTH <sup>(1)</sup> V (mm) ± 0.5 mm	ORDERING CODE MISSING DIGITS SEE ORDERING CODE BELOW
<b>Y5T (2D3)</b>							
100	± 20 <sup>(2)</sup>	9.0	8.3	12.5	0.8	4.0	HGZ101#BP###KR
120							HGZ121#BP###KR
150							HGZ151#BP###KR
180		HGZ181#BP###KR					
220		HGZ221#BP###KR					
270		HGZ271#BP###KR					
330		HGZ331#BP###KR					
390		HGZ391#BP###KR					
470		HGZ471#BP###KR					
560		HGZ561#BP###KR					
680		HGZ681#BP###KR					
820		HGZ821#BP###KR					
1000		HGZ102#BP###KR					
1200		HGZ122#BP###KR					
1500		HGZ152#BP###KR					
1800		HGZ182#BP###KR					
2200	HGZ222#BP###KR						

**Notes**

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

ORDERING CODE							
#	7 <sup>th</sup> digit	Capacitance tolerance	± 10 % = K, ± 20 % = M				
###	10 <sup>th</sup> to 12 <sup>th</sup> digit	Lead configuration	see "General Information"				
<b>Example</b>	<b>HGZ</b>	<b>821</b>	<b>M</b>	<b>BP</b>	<b>ERY</b>	<b>K</b>	<b>R</b>
	Series	Capacitance value	Tolerance code	Voltage code	Lead configuration	Internal code	RoHS compliant



RELATED DOCUMENTS	
General Information	<a href="http://www.vishay.com/doc?22001">www.vishay.com/doc?22001</a>



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