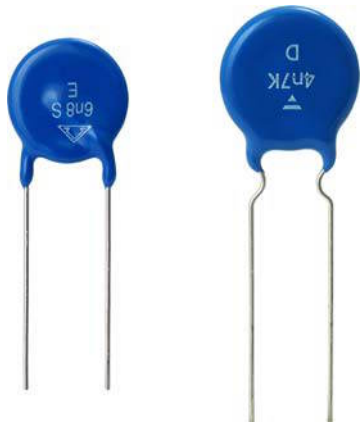
Ceramic Singlelayer DC Disc Capacitors, 500 V_{DC} General Purpose



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

- Bypassing
- Resonant circuits
- Coupling

QUICK REFERENCE DATA	
DESCRIPTION	**VALUE**
Ceramic Class	2
Ceramic Dielectric	Y5T, Y5U
Voltage (V_{DC})	500
Min. Capacitance (pF)	10
Max. Capacitance (pF)	10 000
Mounting	Radial

MARKING

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

OPERATING TEMPERATURE RANGE

-40 °C to +85 °C

TEMPERATURE CHARACTERISTICS

Y5T, Y5U

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.

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 10 nF

RATED VOLTAGE

500 V_{DC}

DIELECTRIC STRENGTH

1250 V_{DC}, 2 s Component test

INSULATION RESISTANCE AT 500 V_{DC}

≥ 5000 MΩ (60 s)

TOLERANCE ON CAPACITANCE

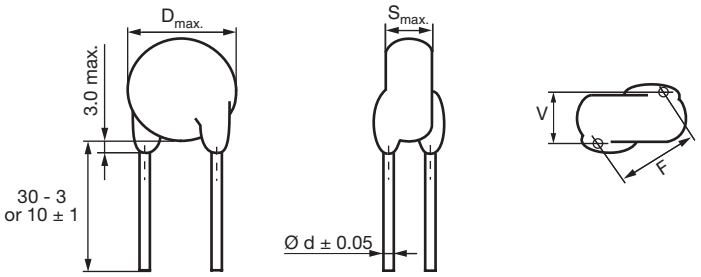
± 10 %, ± 20 %, - 20 % / + 50 %

DISSIPATION FACTOR

C < 100 pF: max. 3.0 % (1 MHz)

C ≥ 100 pF: max. 3.0 % (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)							
10	± 10, ± 20	6.0	3.0	5.0	0.6	1.6	HSZ100#AQ###KR
12							HSZ120#AQ###KR
15						1.5	HSZ150#AQ###KR
18						1.3	HSZ180#AQ###KR
22						1.1	HSZ220#AQ###KR
27						1.3	HSZ270#AQ###KR
33						1.4	HSZ330#AQ###KR
39							HSZ390#AQ###KR
47						1.2	HSZ470#AQ###KR
56							HSZ560#AQ###KR
68						1.4	HSZ680#AQ###KR
82							HSZ820#AQ###KR
100							HSZ101#AQ###KR
120						1.1	HSZ121#AQ###KR
150							HSZ151#AQ###KR
180						1.6	HSZ181#AQ###KR
220							HSZ221#AQ###KR
270						1.3	HSZ271#AQ###KR
330							HSZ331#AQ###KR
390						1.2	HSZ391#AQ###KR
470							HSZ471#AQ###KR
560		7.0					HSZ561#AQ###KR
680							HSZ681#AQ###KR
820						1.1	HSZ821#AQ###KR
1000							HSZ102#AQ###KR
1200		8.0				1.2	HSZ122#AQ###KR
1500						1.1	HSZ152#AQ###KR
1800						1.2	HSZ182#AQ###KR
2200		9.0		7.5			HSZ222#AQ###KR
2700		11.0					HSZ272#AQ###KR
3300							HSZ332#AQ###KR
3900		15.0					HSZ392#AQ###KR
4700						1.1	HSZ472#AQ###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)							
470	- 20 / + 50 (2)	6.0	4.0	5.0	0.6	1.1	HSE471#AQ###KR
680						1.2	HSE681#AQ###KR
1000						1.4	HSE102#AQ###KR
1500		7.0				1.2	HSE152#AQ###KR
2200							HSE222#AQ###KR
3300		11.0		7.5		1.1	HSE332#AQ###KR
4700							HSE472#AQ###KR
6800		13.0					HSE682#AQ###KR
8200		15.0				1.4	HSE822#AQ###KR
10 000						1.2	HSE103#AQ###KR

Notes

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

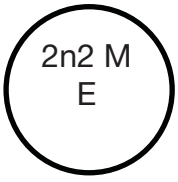
(2) ± 20 % available on request

ORDERING CODE

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

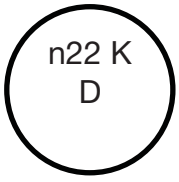
Example	HSE	103	S	AQ	CRY	K	R
	Series	Capacitance value	Tolerance code	Voltage code	Lead configuration	Internal code	RoHS compliant

MARKING



HSE 470 pF to 4.7 nF

HSE 6.8 nF to 10 nF



HSZ 10 pF to 3.9 nF

HSZ 4.7 nF

RELATED DOCUMENTS

General Information	www.vishay.com/doc?22001

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