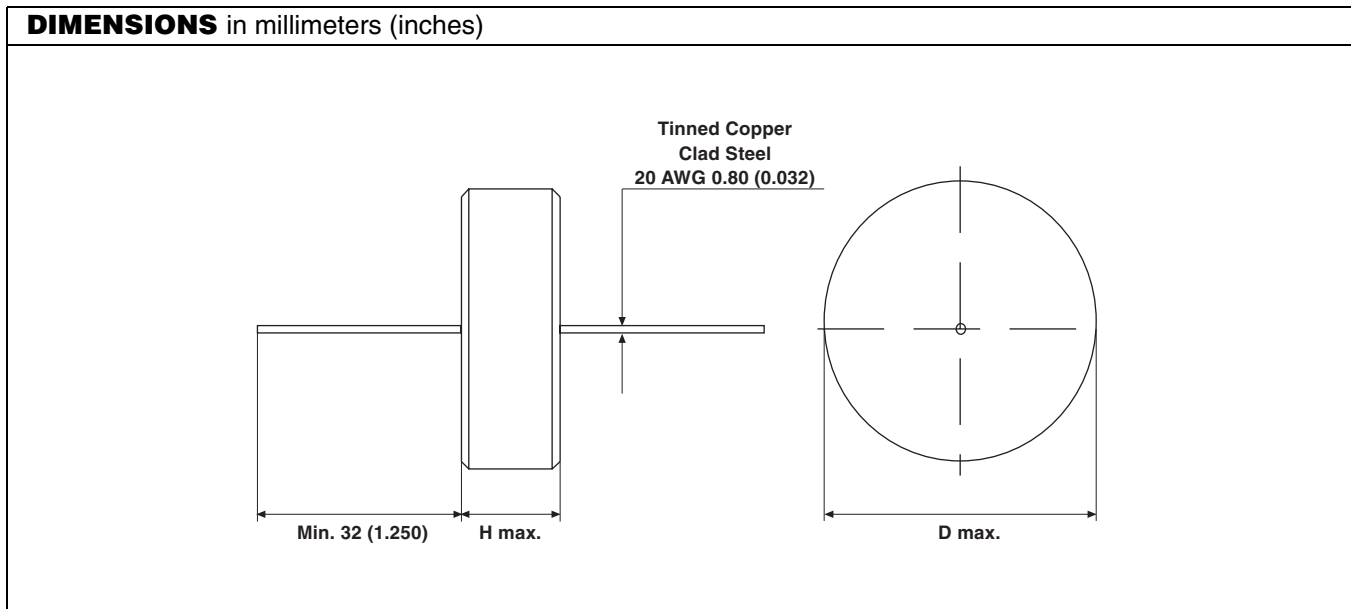


## High Voltage Capacitors with Axial Leads

STANDARD VERSION	RoHS COMPLIANT VERSION
660C 10A ... 10 kV <sub>DC</sub>	660R 10A ... 10 kV <sub>DC</sub>
660C 15A ... 15 kV <sub>DC</sub>	660R 15A ... 15 kV <sub>DC</sub>
660C 20A ... 20 kV <sub>DC</sub>	660R 20A ... 20 kV <sub>DC</sub>
660C 30A ... 30 kV <sub>DC</sub>	660R 30A ... 30 kV <sub>DC</sub>

**RoHS  
COMPLIANT**



**DIELECTRIC STRENGTH**

150 % of rated voltage (in dielectric fluid), charging current limited to 50 mA

**DISSIPATION FACTOR  $\tan \delta$**

N4700:  $\leq 2 \cdot 10^{-3}$  (1 kHz)  
X7R, Z5U:  $\leq 20 \cdot 10^{-3}$  (1 kHz)

**INSULATION RESISTANCE**

MIN. 200 000 M $\Omega$ , at 180 V<sub>DC</sub> or 1000  $\Omega$ F

**OPERATING TEMPERATURE RANGE**

- 55 °C to + 125 °C

**MATERIAL**

Capacitor elements made from Class 1, Class 2 or Class 3 ceramic in a molded case, high temperature epoxy construction  
Leads: Tinned copper clad steel

**MARKING**

Capacitance value and tolerance,  
Rated DC voltage, T/C code,  
Production date code, CM mark

ORDERING INFORMATION				
660C20AZT68	20 kV <sub>DC</sub>	680 pF	$\pm 20 \%$	N4700
MODEL	RATED VOLTAGE	CAPACITANCE VALUE	TOLERANCE	CERAMIC



MODEL NUMBER 4TH DIGIT: C = STANDARD R = RoHS COMPLIANT	CERAMIC	CAP. VALUE (pF)	TOLERANCE (%)	RATED VOLTAGE (kV <sub>DC</sub> )	RATED VOLTAGE (kV <sub>RMS</sub> )	D MAX. (mm)	D MAX. (In)	H MAX. (mm)	H MAX. (In)				
<b>660.10AZ....</b>													
660.10AZT47	N4700	470	± 20 %	10	3	21	0.83	13	0.50				
660.10AZD10		1000				30	1.18						
660.10AZD20		2000				37	1.45						
<b>660.10AC...</b>													
660.10ACT18	X7R	180	± 20 %	10	3	21	0.83	13	0.50				
660.10ACT22		220											
660.10ACT33		330											
660.10ACT47		470											
660.10ACT68		680											
660.10ACD10		1000											
660.10ACD15		1500				30	1.18	15	0.60				
660.10ACD22		2200								14	0.55		
660.10ACD33		3300											
660.10ACD47		4700				37	1.45	13	0.50				
<b>660.10AE...</b>													
660.10AED15		Z5U				1500	+ 80/- 20 %	10	3	21	0.83	13	0.50
660.10AED22	2200												
660.10AED33	3300												
660.10AED47	4700		37	1.45	11	0.45							
660.10AED68	6800												
660.10AES10	10 000												
<b>660.15AZ...</b>													
660.15AZT39	N4700	390	± 20 %	15	5	21	0.83	13	0.50				
660.15AZT82		820				30	1.18						
660.15AZD15		1500				37	1.45			11	0.45		
<b>660.15AC...</b>													
660.15ACT10	X7R	100	± 20 %	15	5	21	0.83	13	0.50				
660.15ACT22		220											
660.15ACT33		330											
660.15ACT47		470											
660.15ACT68		680											
660.15ACD10		1000											
660.15ACD15		1500				30	1.18	15	0.60				
660.15ACD22		2200								17	0.65		
660.15ACD33		3300											
660.15ACD39		3900				37	1.45	15	0.60				
<b>660.15AE...</b>													
660.15AED10		Z5U				1000	+ 80/- 20 %	15	5	21	0.83	13	0.50
660.15AED15	1500												
660.15AED22	2200												
660.15AED33	3300		30	1.18	13	0.50							
660.15AED47	4700												
660.15AED68	6800												
<b>660.20AZ...</b>													
660.20AZT22	N4700	220	± 20 %	20	7	21	0.83	15	0.60				
660.20AZT68		680				30	1.18						
660.20AZD10		1000				37	1.45						

MODEL NUMBER 4TH DIGIT: C = STANDARD R = RoHS COMPLIANT	CERAMIC	CAP. VALUE (pF)	TOLERANCE (%)	RATED VOLTAGE (kV <sub>DC</sub> )	RATED VOLTAGE (kV <sub>RMS</sub> )	D MAX. (mm)	D MAX. (in)	H MAX. (mm)	H MAX. (in)
<b>660.20AC...</b>									
660.20ACT10	X7R	100	± 20 %	20	7	21	0.83	15	0.60
660.20ACT22		220							
660.20ACT33		330							
660.20ACT47		470							
660.20ACT68		680				15	0.60		
660.20ACD10		1000							
660.20ACD15		1500				20	0.80		
660.20ACD22		2200							
660.20ACD25		2500				18	0.70		
660.20ACD27		2700							
<b>660.20AE...</b>									
660.20AET68	Z5U	680	+ 80/- 20 %	20	7	21	0.83	15	0.60
660.20AED10		1000						17	0.66
660.20AED15		1500				15	0.60		
660.20AED22		2200							
660.20AED33		3300				30	1.18		
660.20AED47		4700							
660.20AED50		5000				37	1.45	19	0.75
								14	0.55
<b>660.30AZ...</b>									
660.30AZT18	N4700	180	± 20 %	30	10	21	0.83	20	0.80
660.30AZT47		470				30	1.18		
660.30AZT68		680				37	1.45		
<b>660.30AC...</b>									
660.30ACT10	X7R	100	± 20 %	30	10	21	0.83	20	0.80
660.30ACT22		220							
660.30ACT33		330							
660.30ACT47		470							
660.30ACT68		680				30	1.18	20	0.80
660.30ACD10		1000							
660.30ACD15		1500				37	1.45		
660.30ACD20		2000							
<b>660.30AE...</b>									
660.30AET47	Z5U	470	+ 80/- 20 %	30	10	21	0.83	20	0.80
660.30AET68		680						19	0.75
660.30AET82		820						20	0.80
660.30AED10		1000							
660.30AED12		1200				30	1.18	19	0.75
660.30AED15		1500							
660.30AED18		1800							
660.30AED20		2000							
660.30AED22		2200							
660.30AED25		2500				37	1.45		
660.30AED30		3000							
660.30AED33		3300							
								20	0.80



## Disclaimer

All product specifications and data are subject to change without notice.

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 herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

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.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.