

# EIA Class 2 Temperature/ Frequency Stable Ceramic Capacitors



## Highlights

- Provides exceptional stability where minimum variation in capacitance is required
- Conformally Coated
- Radial Leads

## Specifications

<b>Capacitance Range:</b>	100 pF to 10,000 pF
<b>Voltage Range:</b>	500 and 1,000 VDC
<b>Tolerance:</b>	10%
<b>Operating Temperature Range:</b>	-30 °C to +85 °C
<b>Lead Length:</b>	1 inch minimum
<b>Insulation Resistance:</b>	10,000 megohms (min)
<b>Power Factor @ 1000 Hz:</b>	1.5% Max
<b>Breakdown Voltage:</b>	2.5 x rated(5 seconds Max)

## Ratings

Part Number	Capacity pF	Tol	Temp Coef	Size (inches)				Size (Millimeters)				Part Number	Capacity pF	Tol	Temp Coef	Size (inches)				Size (Millimeters)			
				D	T	S	d	D	T	S	d					D	T	S	d	D	T	S	d
<b>500 WVDC</b>												<b>1000 WVDC</b>											
SM151K	150	10%	Y5E	.236	.157	.252	.025	6.0	4.0	6.4	0.65	SP101K	100	10%	Y5E	.238	.236	.252	.025	6.0	6.0	6.4	0.65
SM221K	220	10%	Y5E	.236	.157	.252	.025	6.0	4.0	6.4	0.65	SP151K	150	10%	Y5E	.238	.236	.252	.025	6.0	6.0	6.4	0.65
SM391K	390	10%	Y5E	.236	.157	.252	.025	6.0	4.0	6.4	0.65	SP181K	180	10%	Y5E	.238	.236	.252	.025	6.0	6.0	6.4	0.65
SM471K	470	10%	Y5E	.236	.157	.252	.025	6.0	4.0	6.4	0.65	SP221K	220	10%	Y5E	.238	.236	.252	.025	6.0	6.0	6.4	0.65
SM561K	560	10%	Y5E	.236	.157	.252	.025	6.0	4.0	6.4	0.65	SP271K	270	10%	Y5E	.238	.236	.252	.025	6.0	6.0	6.4	0.65
SM681K	680	10%	Y5E	.236	.157	.252	.025	6.0	4.0	6.4	0.65	SP331K	330	10%	Y5E	.238	.236	.252	.025	6.0	6.0	6.4	0.65
SM102K	1,000	10%	Y5E	.339	.157	.252	.025	8.6	4.0	6.4	0.65	SP391K	390	10%	Y5E	.238	.236	.252	.025	6.0	6.0	6.4	0.65
SM222K	2,200	10%	Y5E	.433	.157	.252	.025	11.0	4.0	6.4	0.65	SP471K	470	10%	Y5E	.238	.236	.252	.025	6.0	6.0	6.4	0.65
SM472K	4,700	10%	Y5E	.571	.157	.374	.025	14.5	4.0	9.5	0.65	SP561K	560	10%	Y5E	.291	.236	.252	.025	7.4	6.0	6.4	0.65
SM682K	6,800	10%	Y5E	.748	.157	.374	.025	19.0	4.0	9.5	0.65	SP681K	680	10%	Y5E	.291	.236	.252	.025	7.4	6.0	6.4	0.65
SM103K	10,000	10%	Y5E	.748	.157	.374	.025	19.0	4.0	9.5	0.65	SP102K	1,000	10%	Y5E	.374	.236	.252	.025	9.5	6.0	6.4	0.65
												SP152K	1,500	10%	Y5E	.433	.236	.252	.025	11.0	6.0	6.4	0.65
												SP182K	1,800	10%	Y5E	.433	.236	.252	.025	11.0	6.0	6.4	0.65
												SP222K	2,200	10%	Y5E	.492	.236	.252	.025	12.5	6.0	6.4	0.65
												SP272K	2,700	10%	Y5E	.590	.236	.374	.025	15.0	6.0	9.5	0.65
												SP392K	3,900	10%	Y5E	.641	.236	.374	.025	16.3	6.0	9.5	0.65
												SP472K	4,700	10%	Y5E	.641	.236	.374	.025	16.3	6.0	9.5	0.65

# EIA Class 2 Temperature/ Frequency Stable Ceramic Capacitors

## High Voltage Highlights and Specifications

- Highly Efficient for Bypass and Coupling Applications
- Designed Around EIA Test
- Spec. RS-165ARadial Leads

**Capacitance Range:** 100 pF to 10,000 pF  
**Voltage Range:** 2,000 and 3,000 WVDC  
**Tolerance:** 10%. 20%  
**Operating Temperature Range:** -30 °C to +85 °C  
**Lead Length:** 1 inch minimum  
**Insulation Resistance:** 10,000 megohms (min)  
**Power Factor @ 1000 Hz:** 2.5% Max  
**Breakdown Voltage:** 2.5 x rated(5 seconds Max)

## Ratings

Part Number	Capacity pF	Tol	Temp Coef	Size (inches)				Size (Millimeters)			
				D	T	S	d	D	T	S	d
<b>2000 WVDC</b>											
HS102M	1,000	20%	Y5U**	.394	.236	.252	.032	10.0	6.0	6.4	0.8
HS152M	1,500	20%	Y5U**	.394	.236	.252	.032	10.0	6.0	6.4	0.8
HS222M	2,200	20%	Y5U**	.433	.236	.252	.032	11.0	6.0	6.4	0.8
HS332M	3,300	20%	Y5U**	.590	.236	.374	.032	15.0	6.0	9.5	0.8
HS472M	4,700	20%	Y5U**	.590	.236	.374	.032	15.0	6.0	9.5	0.8
HS682M	6,800	20%	Y5U**	.787	.236	.374	.032	20.0	6.0	9.5	0.8
HS103M	10,000	20%	Y5U**	.787	.236	.374	.032	20.0	6.0	9.5	0.8
<b>3000 WVDC</b>											
HT101K	100	10%	Y5P	.394	.236	.374	.032	10.0	6.0	9.5	0.8
HT121K	120	10%	Y5P	.394	.236	.374	.032	10.0	6.0	9.5	0.8
HT151K	150	10%	Y5P	.394	.236	.374	.032	10.0	6.0	9.5	0.8
HT181K	180	10%	Y5P	.394	.236	.374	.032	10.0	6.0	9.5	0.8
HT221K	220	10%	Y5P	.394	.236	.374	.032	10.0	6.0	9.5	0.8
HT271K	270	10%	Y5P	.394	.236	.374	.032	10.0	6.0	9.5	0.8
HT331K	330	10%	Y5P	.394	.236	.374	.032	10.0	6.0	9.5	0.8

Part Number	Capacity pF	Tol	Temp Coef	Size (inches)				Size (Millimeters)			
				D	T	S	d	D	T	S	d
<b>3000 WVDC</b>											
HT391K	390	10%	Y5P	.394	.236	.374	.032	10.0	6.0	9.5	0.8
HT471K	470	10%	Y5P	.394	.236	.374	.032	10.0	6.0	9.5	0.8
HT561K	560	10%	Y5P	.394	.236	.374	.032	10.0	6.0	9.5	0.8
HT681K	680	10%	Y5P	.433	.236	.374	.032	11.0	6.0	9.5	0.8
HT821K	820	10%	Y5P	.433	.236	.374	.032	11.0	6.0	9.5	0.8
HT102K	1,000	10%	Y5P	.590	.236	.374	.032	15.0	6.0	9.5	0.8
HT102M	1,000	20%	Y5U**	.394	.236	.374	.032	10.0	6.0	9.5	0.8
HT122K	1,200	10%	Y5P	.590	.236	.374	.032	15.0	6.0	9.5	0.8
HT152K	1,500	10%	Y5P	.590	.236	.374	.032	11.0	6.0	9.5	0.8
HT152M	1,500	20%	Y5U**	.433	.236	.374	.032	11.0	6.0	9.5	0.8
HT182K	1,800	10%	Y5P	.590	.236	.374	.032	15.0	6.0	9.5	0.8
HT182M	1,800	20%	Y5U**	.433	.236	.374	.032	11.0	6.0	9.5	0.8
HT222K	2,200	10%	Y5P	.787	.236	.374	.032	20.0	6.0	9.5	0.8
HT222M	2,200	20%	Y5U**	.590	.236	.374	.032	15.0	6.0	9.5	0.8
HT272K	2,700	10%	Y5P	.787	.236	.374	.032	20.0	6.0	9.5	0.8
HT332K	3,300	10%	Y5P	.787	.236	.374	.032	20.0	6.0	9.5	0.8
HT472M	4,700	20%	Y5U**	.787	.236	.374	.032	20.0	6.0	9.5	0.8
HT682M	6,800	20%	Y5U**	0.787	.236	.374	.032	20.0	6.0	9.5	0.8

**\*\*Please note: Y5U Will no longer be available once stock is depleted. (2/23/05)**