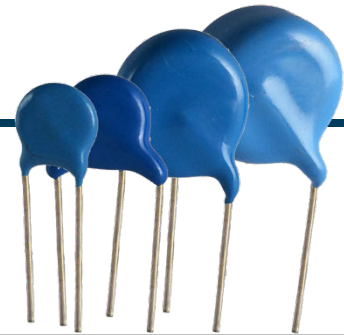




# TY4 SERIES (Y5U)

3 to 20kV  
High Voltage Ceramic Capacitors



## Features

- Radial Leaded Package
- Y5U Temperature Characteristics

## Specifications

Part Number <sup>1</sup>	C pF	Tolerance <sup>1</sup> ±%	V <sub>RATE</sub> kVDC	V <sub>WITHSTAND</sub> kVDC	D <sup>2</sup> mm	H <sup>2</sup> mm	T <sup>2</sup> mm	L <sup>3</sup> mm	Ls <sup>4</sup> mm	d <sup>5</sup> mm
TY4Y5U331•3KV	330	K,M,Z	3.0	6.0	8.0	11.0	5.0	25.0	7.5	0.6
TY4Y5U471•3KV	470	K,M,Z	3.0	6.0	8.0	11.0	5.0	25.0	7.5	0.6
TY4Y5U561•3KV	560	K,M,Z	3.0	6.0	8.0	11.0	5.0	25.0	7.5	0.6
TY4Y5U681•3KV	680	K,M,Z	3.0	6.0	8.0	11.0	5.0	25.0	7.5	0.6
TY4Y5U821•3KV	820	K,M,Z	3.0	6.0	8.0	11.0	5.0	25.0	7.5	0.6
TY4Y5U102•3KV	1000	K,M,Z	3.0	6.0	8.0	11.0	5.0	25.0	7.5	0.6
TY4Y5U152•3KV	1500	K,M,Z	3.0	6.0	9.0	12.0	5.0	25.0	7.5	0.6
TY4Y5U222•3KV	2200	K,M,Z	3.0	6.0	11.0	14.0	5.0	25.0	7.5	0.6
TY4Y5U272•3KV	2700	K,M,Z	3.0	6.0	12.0	15.0	5.0	25.0	7.5	0.6
TY4Y5U332•3KV	3300	K,M,Z	3.0	6.0	13.0	16.0	5.0	25.0	7.5	0.6
TY4Y5U472•3KV	4700	K,M,Z	3.0	6.0	15.0	18.0	5.0	25.0	7.5	0.6
TY4Y5U682•3KV	6800	K,M,Z	3.0	6.0	16.0	19.0	5.0	25.0	7.5	0.6
TY4Y5U822•3KV	8200	K,M,Z	3.0	6.0	18.0	21.0	5.0	25.0	7.5	0.6
TY4Y5U103•3KV	10000	K,M,Z	3.0	6.0	19.0	22.0	5.0	25.0	7.5	0.6
TY4Y5U331•4KV	330	K,M,Z	4.0	8.0	8.0	11.0	6.0	25.0	10.0	0.6
TY4Y5U471•4KV	470	K,M,Z	4.0	8.0	8.0	11.0	6.0	25.0	10.0	0.6
TY4Y5U561•4KV	560	K,M,Z	4.0	8.0	8.0	11.0	6.0	25.0	10.0	0.6
TY4Y5U681•4KV	680	K,M,Z	4.0	8.0	8.0	11.0	6.0	25.0	10.0	0.6
TY4Y5U821•4KV	820	K,M,Z	4.0	8.0	9.0	12.0	6.0	25.0	10.0	0.6
TY4Y5U102•4KV	1000	K,M,Z	4.0	8.0	9.0	12.0	6.0	25.0	10.0	0.6
TY4Y5U152•4KV	1500	K,M,Z	4.0	8.0	10.0	13.0	6.0	25.0	10.0	0.6
TY4Y5U222•4KV	2200	K,M,Z	4.0	8.0	12.0	15.0	6.0	25.0	10.0	0.6
TY4Y5U272•4KV	2700	K,M,Z	4.0	8.0	13.0	16.0	6.0	25.0	10.0	0.6
TY4Y5U332•4KV	3300	K,M,Z	4.0	8.0	14.0	17.0	6.0	25.0	10.0	0.6
TY4Y5U472•4KV	4700	K,M,Z	4.0	8.0	15.0	18.0	6.0	25.0	10.0	0.6
TY4Y5U682•4KV	6800	K,M,Z	4.0	8.0	18.0	21.0	6.0	25.0	10.0	0.6
TY4Y5U822•4KV	8200	K,M,Z	4.0	8.0	19.0	22.0	6.0	25.0	10.0	0.6
TY4Y5U103•4KV	10000	K,M,Z	4.0	8.0	20.0	23.0	6.5	25.0	10.0	0.7
TY4Y5U331•5KV	330	K,M,Z	5.0	10.0	8.0	11.0	7.0	25.0	10.0	0.6
TY4Y5U471•5KV	470	K,M,Z	5.0	10.0	8.0	11.0	7.0	25.0	10.0	0.6
TY4Y5U561•5KV	560	K,M,Z	5.0	10.0	8.0	11.0	7.0	25.0	10.0	0.6
TY4Y5U681•5KV	680	K,M,Z	5.0	10.0	9.0	12.0	7.0	25.0	10.0	0.6
TY4Y5U821•5KV	820	K,M,Z	5.0	10.0	10.0	13.0	7.0	25.0	10.0	0.6
TY4Y5U102•5KV	1000	K,M,Z	5.0	10.0	10.0	13.0	7.0	25.0	10.0	0.6
TY4Y5U152•5KV	1500	K,M,Z	5.0	10.0	11.0	14.0	7.0	25.0	10.0	0.6
TY4Y5U222•5KV	2200	K,M,Z	5.0	10.0	12.0	15.0	7.0	25.0	10.0	0.6
TY4Y5U272•5KV	2700	K,M,Z	5.0	10.0	13.0	16.0	7.0	25.0	10.0	0.6
TY4Y5U332•5KV	3300	K,M,Z	5.0	10.0	15.0	18.0	7.0	25.0	10.0	0.6
TY4Y5U472•5KV	4700	K,M,Z	5.0	10.0	17.0	20.0	7.0	25.0	10.0	0.6
TY4Y5U682•5KV	6800	K,M,Z	5.0	10.0	20.0	23.0	7.5	25.0	10.0	0.7



Part Number <sup>1</sup>	C pF	Tolerance <sup>1</sup> ±%	V <sub>RATE</sub> kVDC	V <sub>WITHSTAND</sub> kVDC	D <sup>2</sup> mm	H <sup>2</sup> mm	T <sup>2</sup> mm	L <sup>3</sup> mm	Ls <sup>4</sup> mm	d <sup>5</sup> mm
TY4Y5U822•5KV	8200	K,M,Z	5.0	10.0	21.0	25.0	7.5	25.0	10.0	0.7
TY4Y5U103•5KV	10000	K,M,Z	5.0	10.0	23.0	26.0	7.5	25.0	10.0	0.7
TY4Y5U331•6KV	330	K,M,Z	6.0	12.0	9.0	12.0	7.5	25.0	10.0	0.6
TY4Y5U471•6KV	470	K,M,Z	6.0	12.0	9.0	12.0	7.5	25.0	10.0	0.6
TY4Y5U561•6KV	560	K,M,Z	6.0	12.0	9.0	12.0	7.5	25.0	10.0	0.6
TY4Y5U681•6KV	680	K,M,Z	6.0	12.0	10.0	13.0	7.5	25.0	10.0	0.6
TY4Y5U821•6KV	820	K,M,Z	6.0	12.0	10.0	13.0	7.5	25.0	10.0	0.6
TY4Y5U102•6KV	1000	K,M,Z	6.0	12.0	10.0	13.0	7.5	25.0	10.0	0.6
TY4Y5U152•6KV	1500	K,M,Z	6.0	12.0	11.0	14.0	7.5	25.0	10.0	0.6
TY4Y5U222•6KV	2200	K,M,Z	6.0	12.0	12.0	15.0	7.5	25.0	10.0	0.6
TY4Y5U272•6KV	2700	K,M,Z	6.0	12.0	14.0	17.0	7.5	25.0	10.0	0.6
TY4Y5U332•6KV	3300	K,M,Z	6.0	12.0	16.0	19.0	7.5	25.0	10.0	0.6
TY4Y5U472•6KV	4700	K,M,Z	6.0	12.0	17.0	20.0	7.5	25.0	10.0	0.6
TY4Y5U682•6KV	6800	K,M,Z	6.0	12.0	19.0	22.0	8.0	25.0	10.0	0.7
TY4Y5U822•6KV	8200	K,M,Z	6.0	12.0	22.0	25.0	8.0	25.0	10.0	0.7
TY4Y5U103•6KV	10000	K,M,Z	6.0	12.0	25.0	29.0	8.0	25.0	10.0	0.7
TY4Y5U331•8KV	330	K,M,Z	8.0	16.0	9.0	12.0	8.0	25.0	10.0	0.6
TY4Y5U471•8KV	470	K,M,Z	8.0	16.0	9.0	12.0	8.0	25.0	10.0	0.6
TY4Y5U561•8KV	560	K,M,Z	8.0	16.0	10.0	13.0	8.0	25.0	10.0	0.6
TY4Y5U681•8KV	680	K,M,Z	8.0	16.0	10.0	13.0	8.0	25.0	10.0	0.6
TY4Y5U821•8KV	820	K,M,Z	8.0	16.0	11.0	14.0	8.0	25.0	10.0	0.6
TY4Y5U102•8KV	1000	K,M,Z	8.0	16.0	12.0	15.0	8.0	25.0	10.0	0.6
TY4Y5U152•8KV	1500	K,M,Z	8.0	16.0	14.0	17.0	8.0	25.0	10.0	0.6
TY4Y5U222•8KV	2200	K,M,Z	8.0	16.0	17.0	20.0	8.0	25.0	10.0	0.6
TY4Y5U272•8KV	2700	K,M,Z	8.0	16.0	18.0	21.0	8.0	25.0	10.0	0.6
TY4Y5U332•8KV	3300	K,M,Z	8.0	16.0	19.0	22.0	8.0	25.0	10.0	0.6
TY4Y5U472•8KV	4700	K,M,Z	8.0	16.0	22.0	25.0	8.5	25.0	10.0	0.7
TY4Y5U682•8KV	6800	K,M,Z	8.0	16.0	26.0	30.0	8.5	25.0	10.0	0.7
TY4Y5U822•8KV	8200	K,M,Z	8.0	16.0	28.0	32.0	8.5	25.0	10.0	0.7
TY4Y5U331•10KV	330	K,M,Z	10.0	20.0	9.0	12.0	9.0	25.0	10.0	0.7
TY4Y5U471•10KV	470	K,M,Z	10.0	20.0	10.0	13.0	9.0	25.0	10.0	0.7
TY4Y5U561•10KV	560	K,M,Z	10.0	20.0	10.0	13.0	9.0	25.0	10.0	0.7
TY4Y5U681•10KV	680	K,M,Z	10.0	20.0	11.0	14.0	9.0	25.0	10.0	0.7
TY4Y5U821•10KV	820	K,M,Z	10.0	20.0	12.0	15.0	9.0	25.0	10.0	0.7
TY4Y5U102•10KV	1000	K,M,Z	10.0	20.0	13.0	16.0	9.0	25.0	10.0	0.7
TY4Y5U152•10KV	1500	K,M,Z	10.0	20.0	15.0	18.0	9.0	25.0	10.0	0.7
TY4Y5U222•10KV	2200	K,M,Z	10.0	20.0	17.0	20.0	9.0	25.0	10.0	0.7
TY4Y5U272•10KV	2700	K,M,Z	10.0	20.0	18.0	21.0	9.0	25.0	10.0	0.7
TY4Y5U332•10KV	3300	K,M,Z	10.0	20.0	20.0	23.0	9.0	25.0	10.0	0.7
TY4Y5U472•10KV	4700	K,M,Z	10.0	20.0	23.0	27.0	9.0	25.0	10.0	0.7
TY4Y5U682•10KV	6800	K,M,Z	10.0	20.0	27.0	31.0	9.0	25.0	10.0	0.7
TY4Y5U331•12KV	330	K,M,Z	12.0	24.0	10.0	13.0	10.0	25.0	12.5	0.7
TY4Y5U471•12KV	470	K,M,Z	12.0	24.0	11.0	14.0	10.0	25.0	12.5	0.7



Part Number <sup>1</sup>	C pF	Tolerance <sup>1</sup> ±%	V <sub>RATE</sub> kVDC	V <sub>WITHSTAND</sub> kVDC	D <sup>2</sup> mm	H <sup>2</sup> mm	T <sup>2</sup> mm	L <sup>3</sup> mm	Ls <sup>4</sup> mm	d <sup>5</sup> mm
TY4Y5U561•12KV	560	K,M,Z	12.0	24.0	12.0	15.0	10.0	25.0	12.5	0.7
TY4Y5U681•12KV	680	K,M,Z	12.0	24.0	13.0	16.0	10.0	25.0	12.5	0.7
TY4Y5U821•12KV	820	K,M,Z	12.0	24.0	14.0	17.0	10.0	25.0	12.5	0.7
TY4Y5U102•12KV	1000	K,M,Z	12.0	24.0	15.0	18.0	10.0	25.0	12.5	0.7
TY4Y5U152•12KV	1500	K,M,Z	12.0	24.0	17.0	20.0	10.0	25.0	12.5	0.7
TY4Y5U222•12KV	2200	K,M,Z	12.0	24.0	19.0	23.0	10.0	25.0	12.5	0.7
TY4Y5U272•12KV	2700	K,M,Z	12.0	24.0	22.0	25.0	10.0	25.0	12.5	0.7
TY4Y5U332•12KV	3300	K,M,Z	12.0	24.0	23.0	27.0	10.0	25.0	12.5	0.7
TY4Y5U472•12KV	4700	K,M,Z	12.0	24.0	26.0	30.0	10.0	25.0	12.5	0.7
TY4Y5U331•15KV	330	K,M,Z	15.0	30.0	11.0	14.0	11.0	25.0	12.5	0.7
TY4Y5U471•15KV	470	K,M,Z	15.0	30.0	12.0	15.0	11.0	25.0	12.5	0.7
TY4Y5U561•15KV	560	K,M,Z	15.0	30.0	13.0	16.0	11.0	25.0	12.5	0.7
TY4Y5U681•15KV	680	K,M,Z	15.0	30.0	14.0	17.0	11.0	25.0	12.5	0.7
TY4Y5U821•15KV	820	K,M,Z	15.0	30.0	15.0	18.0	11.0	25.0	12.5	0.7
TY4Y5U102•15KV	1000	K,M,Z	15.0	30.0	16.0	19.0	11.0	25.0	12.5	0.7
TY4Y5U152•15KV	1500	K,M,Z	15.0	30.0	19.0	23.0	11.0	25.0	12.5	0.7
TY4Y5U222•15KV	2200	K,M,Z	15.0	30.0	21.0	25.0	11.0	25.0	12.5	0.7
TY4Y5U272•15KV	2700	K,M,Z	15.0	30.0	22.0	26.0	11.0	25.0	12.5	0.7
TY4Y5U332•15KV	3300	K,M,Z	15.0	30.0	25.0	29.0	11.0	25.0	12.5	0.7
TY4Y5U472•15KV	4700	K,M,Z	15.0	30.0	29.0	33.0	11.0	25.0	12.5	0.7
TY4Y5U331•20KV	330	K,M,Z	20.0	40.0	11.0	15.0	14.0	25.0	12.5	0.8
TY4Y5U471•20KV	470	K,M,Z	20.0	40.0	13.0	17.0	14.0	25.0	12.5	0.8
TY4Y5U561•20KV	560	K,M,Z	20.0	40.0	14.0	18.0	14.0	25.0	12.5	0.8
TY4Y5U681•20KV	680	K,M,Z	20.0	40.0	15.0	19.0	14.0	25.0	12.5	0.8
TY4Y5U821•20KV	820	K,M,Z	20.0	40.0	16.0	20.0	14.0	25.0	12.5	0.8
TY4Y5U102•20KV	1000	K,M,Z	20.0	40.0	17.0	21.0	14.0	25.0	12.5	0.8
TY4Y5U152•20KV	1500	K,M,Z	20.0	40.0	19.0	23.0	14.0	25.0	12.5	0.8
TY4Y5U222•20KV	2200	K,M,Z	20.0	40.0	23.0	27.0	14.0	25.0	12.5	0.8
TY4Y5U272•20KV	2700	K,M,Z	20.0	40.0	24.0	28.0	14.0	25.0	12.5	0.8
TY4Y5U332•20KV	3300	K,M,Z	20.0	40.0	27.0	31.0	14.0	25.0	12.5	0.8

<sup>1</sup>TY4Y5U models are offered with K (± 10%), M (± 20%), and Z (+80%, -20%) capacitance tolerances. Substitute the "\*" in the part number with the preferred tolerance. Inquire for additional information.

<sup>2</sup>Maximum dimension.

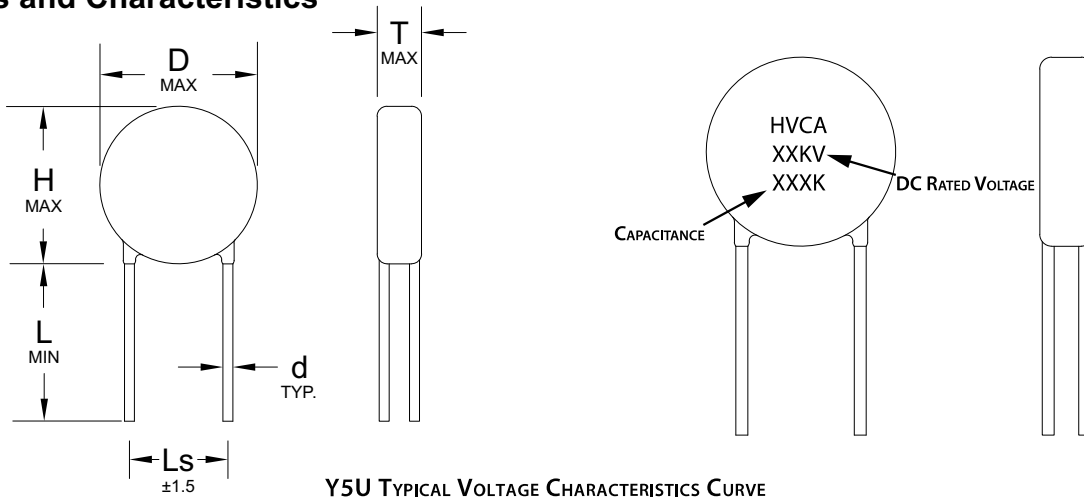
<sup>3</sup>Minimum dimension.

<sup>4</sup>Ls has a ±1.5mm tolerance.

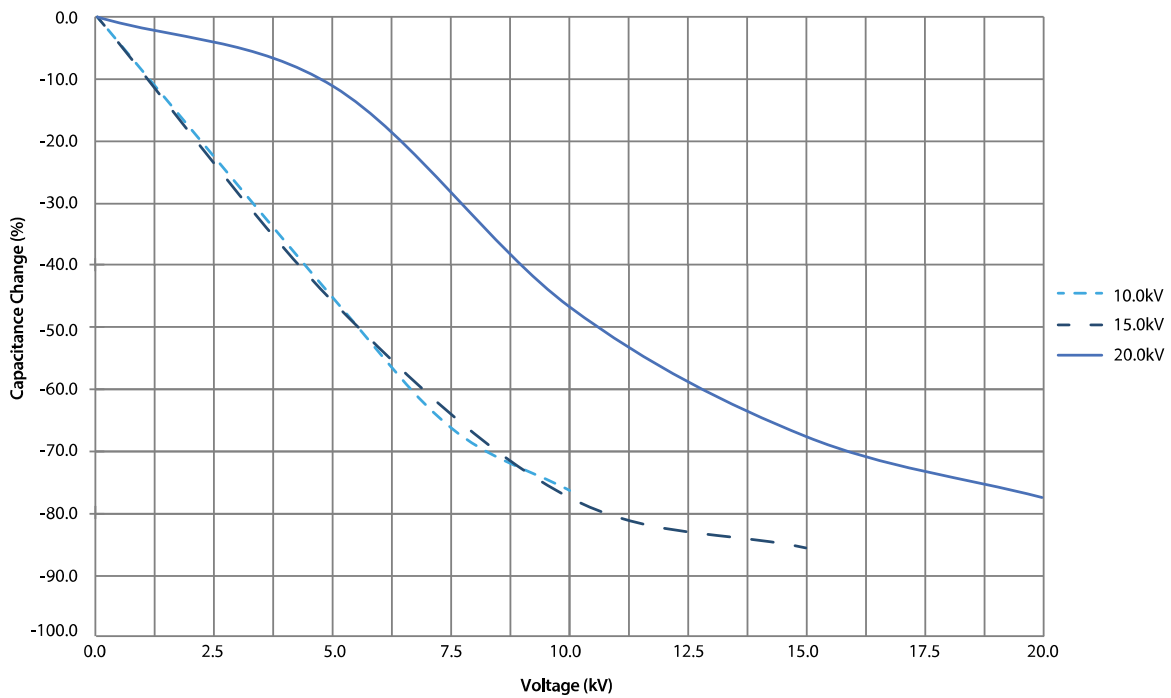
<sup>5</sup>Typical.



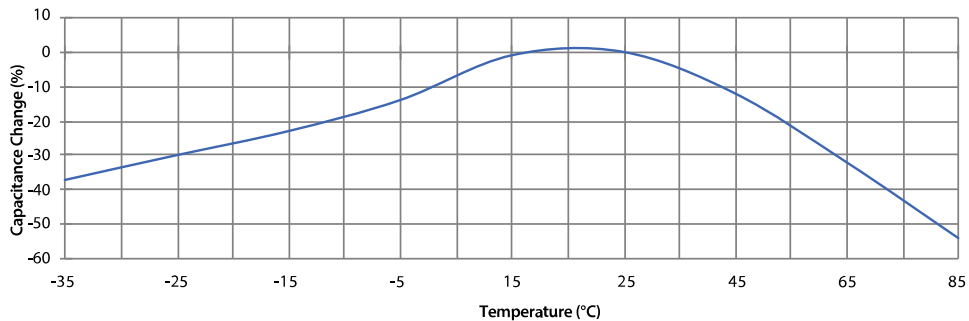
## Drawings and Characteristics



Y5U TYPICAL VOLTAGE CHARACTERISTICS CURVE

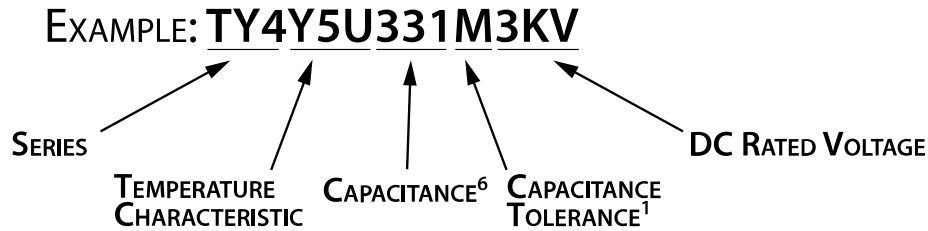


Y5U TYPICAL TEMPERATURE CHARACTERISTICS CURVE





## Part Number Decoder:



<sup>6</sup>Capacitance decoder:

For capacitance values less than 10pF, digits before the “R” are significant digits, while digits after the “R” are the decimal values after the significant digits. For example, 4R7 = 4.7pF, since the 4 is the significant digit while the 7 is the digit after the decimal.

For capacitance values 100pF and higher, the first and second digits are significant digits, while the third digit expresses the number of zeros to follow the two significant digits. For example, 152 = 1500pF, since the 1 and the 5 are the significant digits with 2 zeros that follow.

## Additional Specifications

Specifications	
Operating Temperature Range	-25 to +100°C
Temperature Coefficient	-25 to +85°C
Dissipation Factor	2.5% Max

Note: Specifications subject to change without notice. Photo is representation only.

