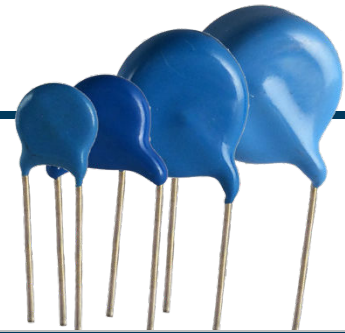




# TY4 SERIES (BxN)

3 to 20kV  
High Voltage Ceramic Capacitors



## Features

- Radial Led Package
- BxN 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
TY4BxN101•3KV	100	K,M,Z	3.0	6.0	8.0	11.0	5.0	25.0	10.0	0.6
TY4BxN151•3KV	150	K,M,Z	3.0	6.0	9.0	12.0	5.0	25.0	10.0	0.6
TY4BxN221•3KV	220	K,M,Z	3.0	6.0	10.0	13.0	5.0	25.0	10.0	0.6
TY4BxN331•3KV	330	K,M,Z	3.0	6.0	11.0	14.0	5.0	25.0	10.0	0.6
TY4BxN471•3KV	470	K,M,Z	3.0	6.0	12.0	15.0	5.0	25.0	10.0	0.6
TY4BxN561•3KV	560	K,M,Z	3.0	6.0	13.0	16.0	5.0	25.0	10.0	0.6
TY4BxN681•3KV	680	K,M,Z	3.0	6.0	14.0	17.0	5.0	25.0	10.0	0.6
TY4BxN821•3KV	820	K,M,Z	3.0	6.0	15.0	18.0	5.0	25.0	10.0	0.6
TY4BxN102•3KV	1000	K,M,Z	3.0	6.0	16.0	19.0	5.0	25.0	10.0	0.6
TY4BxN152•3KV	1500	K,M,Z	3.0	6.0	19.0	22.0	5.0	25.0	10.0	0.6
TY4BxN222•3KV	2200	K,M,Z	3.0	6.0	22.0	25.0	5.5	25.0	10.0	0.7
TY4BxN272•3KV	2700	K,M,Z	3.0	6.0	24.0	28.0	5.5	25.0	10.0	0.7
TY4BxN332•3KV	3300	K,M,Z	3.0	6.0	26.0	30.0	5.5	25.0	10.0	0.7
TY4BxN101•4KV	100	K,M,Z	4.0	8.0	8.0	11.0	5.0	25.0	10.0	0.6
TY4BxN151•4KV	150	K,M,Z	4.0	8.0	9.0	12.0	5.0	25.0	10.0	0.6
TY4BxN221•4KV	220	K,M,Z	4.0	8.0	10.0	13.0	5.0	25.0	10.0	0.6
TY4BxN331•4KV	330	K,M,Z	4.0	8.0	11.0	14.0	5.0	25.0	10.0	0.6
TY4BxN471•4KV	470	K,M,Z	4.0	8.0	13.0	16.0	5.0	25.0	10.0	0.6
TY4BxN561•4KV	560	K,M,Z	4.0	8.0	14.0	17.0	5.0	25.0	10.0	0.6
TY4BxN681•4KV	680	K,M,Z	4.0	8.0	15.0	18.0	5.0	25.0	10.0	0.6
TY4BxN821•4KV	820	K,M,Z	4.0	8.0	16.0	19.0	5.0	25.0	10.0	0.6
TY4BxN102•4KV	1000	K,M,Z	4.0	8.0	18.0	21.0	5.0	25.0	10.0	0.6
TY4BxN152•4KV	1500	K,M,Z	4.0	8.0	20.0	23.0	5.0	25.0	10.0	0.6
TY4BxN222•4KV	2200	K,M,Z	4.0	8.0	24.0	28.0	5.0	25.0	10.0	0.7
TY4BxN272•4KV	2700	K,M,Z	4.0	8.0	26.0	30.0	5.0	25.0	10.0	0.7
TY4BxN101•5KV	100	K,M,Z	5.0	10.0	8.0	11.0	6.0	25.0	10.0	0.6
TY4BxN151•5KV	150	K,M,Z	5.0	10.0	9.0	12.0	6.0	25.0	10.0	0.6
TY4BxN221•5KV	220	K,M,Z	5.0	10.0	11.0	14.0	6.0	25.0	10.0	0.6
TY4BxN331•5KV	330	K,M,Z	5.0	10.0	12.0	15.0	6.0	25.0	10.0	0.6
TY4BxN471•5KV	470	K,M,Z	5.0	10.0	14.0	17.0	6.0	25.0	10.0	0.6
TY4BxN561•5KV	560	K,M,Z	5.0	10.0	15.0	18.0	6.0	25.0	10.0	0.6
TY4BxN681•5KV	680	K,M,Z	5.0	10.0	16.0	19.0	6.0	25.0	10.0	0.6
TY4BxN821•5KV	820	K,M,Z	5.0	10.0	17.0	20.0	6.0	25.0	10.0	0.6
TY4BxN102•5KV	1000	K,M,Z	5.0	10.0	19.0	22.0	6.0	25.0	10.0	0.6
TY4BxN152•5KV	1500	K,M,Z	5.0	10.0	22.0	25.0	7.0	25.0	10.0	0.7
TY4BxN222•5KV	2200	K,M,Z	5.0	10.0	27.0	31.0	7.0	25.0	10.0	0.7
TY4BxN101•6KV	100	K,M,Z	6.0	12.0	9.0	12.0	7.0	25.0	10.0	0.6
TY4BxN151•6KV	150	K,M,Z	6.0	12.0	11.0	14.0	7.0	25.0	10.0	0.6
TY4BxN221•6KV	220	K,M,Z	6.0	12.0	12.0	15.0	7.0	25.0	10.0	0.6
TY4BxN331•6KV	330	K,M,Z	6.0	12.0	14.0	17.0	7.0	25.0	10.0	0.6



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
TY4BxN471•6KV	470	K,M,Z	6.0	12.0	16.0	19.0	7.0	25.0	10.0	0.6
TY4BxN561•6KV	560	K,M,Z	6.0	12.0	17.0	20.0	7.0	25.0	10.0	0.6
TY4BxN681•6KV	680	K,M,Z	6.0	12.0	18.0	21.0	7.0	25.0	10.0	0.6
TY4BxN821•6KV	820	K,M,Z	6.0	12.0	20.0	23.0	7.0	25.0	10.0	0.6
TY4BxN102•6KV	1000	K,M,Z	6.0	12.0	21.0	24.0	8.0	25.0	10.0	0.7
TY4BxN152•6KV	1500	K,M,Z	6.0	12.0	25.0	29.0	8.0	25.0	10.0	0.7
TY4BxN101•8KV	100	K,M,Z	8.0	16.0	10.0	13.0	8.0	25.0	10.0	0.6
TY4BxN151•8KV	150	K,M,Z	8.0	16.0	11.0	14.0	8.0	25.0	10.0	0.6
TY4BxN221•8KV	220	K,M,Z	8.0	16.0	13.0	16.0	8.0	25.0	10.0	0.6
TY4BxN331•8KV	330	K,M,Z	8.0	16.0	15.0	18.0	8.0	25.0	10.0	0.6
TY4BxN471•8KV	470	K,M,Z	8.0	16.0	17.0	20.0	8.0	25.0	10.0	0.6
TY4BxN561•8KV	560	K,M,Z	8.0	16.0	18.0	21.0	8.0	25.0	10.0	0.6
TY4BxN681•8KV	680	K,M,Z	8.0	16.0	20.0	23.0	8.0	25.0	10.0	0.6
TY4BxN821•8KV	820	K,M,Z	8.0	16.0	21.0	24.0	8.0	25.0	10.0	0.6
TY4BxN102•8KV	1000	K,M,Z	8.0	16.0	24.0	28.0	9.0	25.0	10.0	0.7
TY4BxN152•8KV	1500	K,M,Z	8.0	16.0	29.0	33.0	9.0	25.0	10.0	0.7
TY4BxN101•10KV	100	K,M,Z	10.0	20.0	10.0	13.0	9.5	25.0	10.0	0.7
TY4BxN151•10KV	150	K,M,Z	10.0	20.0	12.0	15.0	9.5	25.0	10.0	0.7
TY4BxN221•10KV	220	K,M,Z	10.0	20.0	14.0	17.0	9.5	25.0	10.0	0.7
TY4BxN331•10KV	330	K,M,Z	10.0	20.0	16.0	19.0	9.5	25.0	10.0	0.7
TY4BxN471•10KV	470	K,M,Z	10.0	20.0	19.0	22.0	9.5	25.0	10.0	0.7
TY4BxN561•10KV	560	K,M,Z	10.0	20.0	20.0	23.0	9.5	25.0	10.0	0.7
TY4BxN681•10KV	680	K,M,Z	10.0	20.0	22.0	25.0	9.5	25.0	10.0	0.7
TY4BxN821•10KV	820	K,M,Z	10.0	20.0	23.0	27.0	9.5	25.0	10.0	0.7
TY4BxN102•10KV	1000	K,M,Z	10.0	20.0	26.0	30.0	9.5	25.0	10.0	0.7
TY4BxN101•12KV	100	K,M,Z	12.0	24.0	11.0	15.0	10.0	25.0	12.5	0.7
TY4BxN151•12KV	150	K,M,Z	12.0	24.0	13.0	17.0	10.0	25.0	12.5	0.7
TY4BxN221•12KV	220	K,M,Z	12.0	24.0	15.0	19.0	10.0	25.0	12.5	0.7
TY4BxN331•12KV	330	K,M,Z	12.0	24.0	18.0	22.0	10.0	25.0	12.5	0.7
TY4BxN471•12KV	470	K,M,Z	12.0	24.0	20.0	24.0	10.0	25.0	12.5	0.7
TY4BxN561•12KV	560	K,M,Z	12.0	24.0	23.0	27.0	10.0	25.0	12.5	0.7
TY4BxN681•12KV	680	K,M,Z	12.0	24.0	26.0	30.0	10.0	25.0	12.5	0.7
TY4BxN821•12KV	820	K,M,Z	12.0	24.0	28.0	32.0	10.0	25.0	12.5	0.7
TY4BxN102•12KV	1000	K,M,Z	12.0	24.0	30.0	34.0	10.0	25.0	12.5	0.7
TY4BxN101•15KV	100	K,M,Z	15.0	30.0	12.0	16.0	11.0	25.0	12.5	0.7
TY4BxN151•15KV	150	K,M,Z	15.0	30.0	14.0	18.0	11.0	25.0	12.5	0.7
TY4BxN221•15KV	220	K,M,Z	15.0	30.0	16.0	20.0	11.0	25.0	12.5	0.7
TY4BxN331•15KV	330	K,M,Z	15.0	30.0	19.0	23.0	11.0	25.0	12.5	0.7
TY4BxN471•15KV	470	K,M,Z	15.0	30.0	22.0	26.0	11.0	25.0	12.5	0.7
TY4BxN561•15KV	560	K,M,Z	15.0	30.0	24.0	28.0	11.0	25.0	12.5	0.7
TY4BxN681•15KV	680	K,M,Z	15.0	30.0	27.0	31.0	11.0	25.0	12.5	0.7
TY4BxN821•15KV	820	K,M,Z	15.0	30.0	29.0	33.0	11.0	25.0	12.5	0.7
TY4BxN101•20KV	100	K,M,Z	20.0	40.0	15.0	19.0	14.0	25.0	12.5	0.8
TY4BxN151•20KV	150	K,M,Z	20.0	40.0	17.0	21.0	14.0	25.0	12.5	0.8
TY4BxN221•20KV	220	K,M,Z	20.0	40.0	20.0	24.0	14.0	25.0	12.5	0.8
TY4BxN331•20KV	330	K,M,Z	20.0	40.0	22.0	26.0	14.0	25.0	12.5	0.8



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
TY4BxN471•20KV	470	K,M,Z	20.0	40.0	26.0	30.0	14.0	25.0	12.5	0.8
TY4BxN561•20KV	560	K,M,Z	20.0	40.0	28.0	32.0	14.0	25.0	12.5	0.8
TY4BxN681•20KV	680	K,M,Z	20.0	40.0	30.0	34.0	14.0	25.0	12.5	0.8

<sup>1</sup>TY4BxN 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.

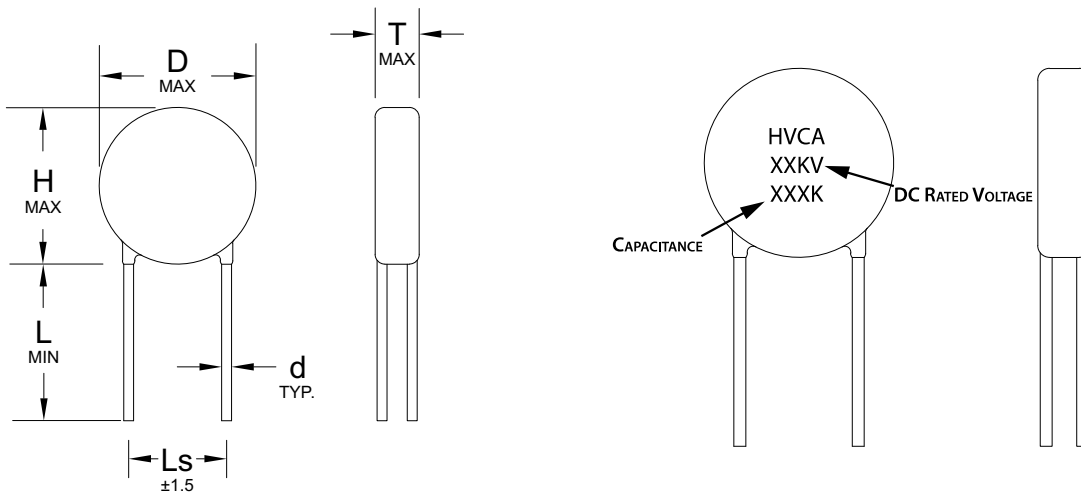
<sup>2</sup>Maximum dimension.

<sup>3</sup>Minimum dimension.

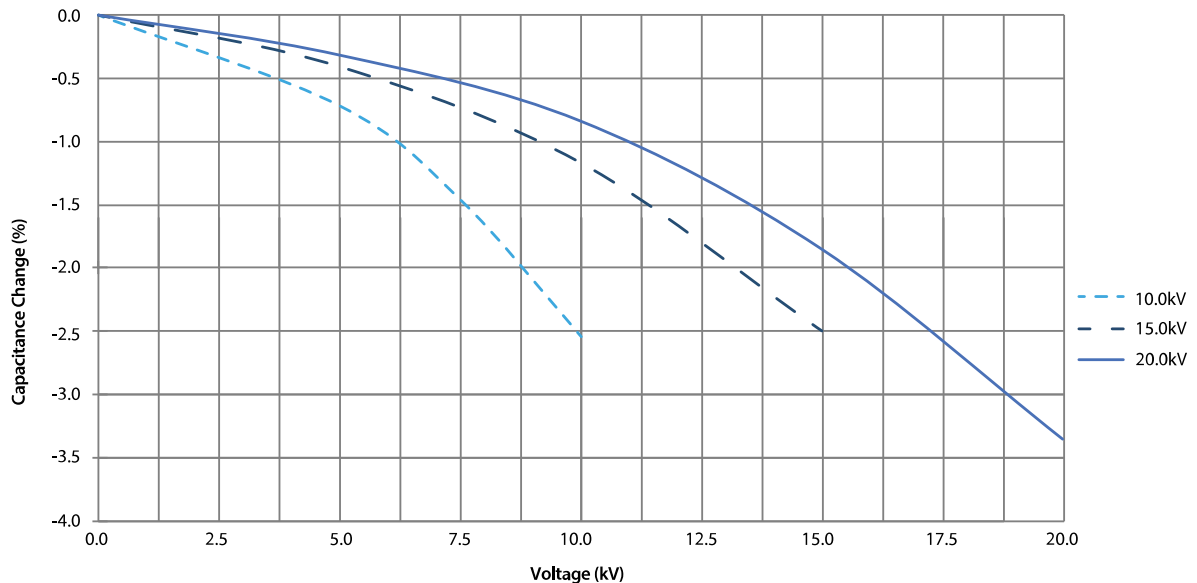
<sup>4</sup>Ls has a ±1.5mm tolerance.

<sup>5</sup>Typical.

## Drawings and Characteristics

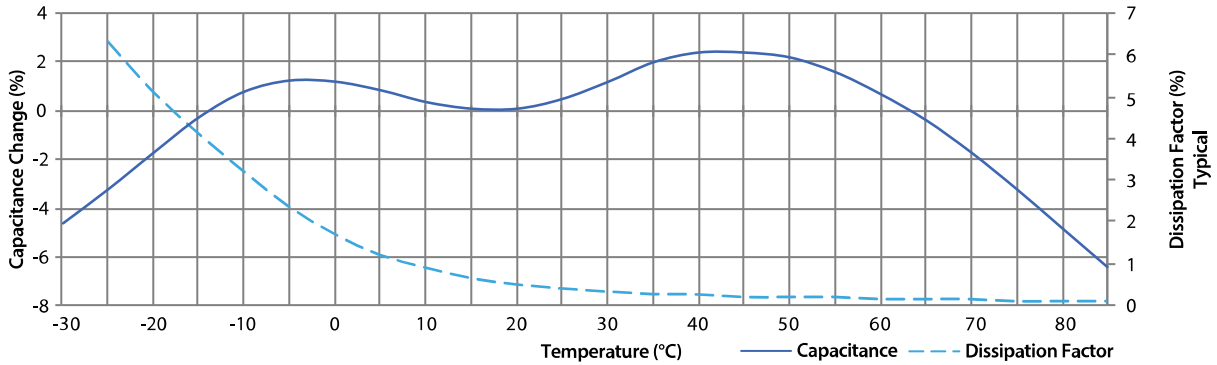


BxN TYPICAL VOLTAGE CHARACTERISTICS CURVE

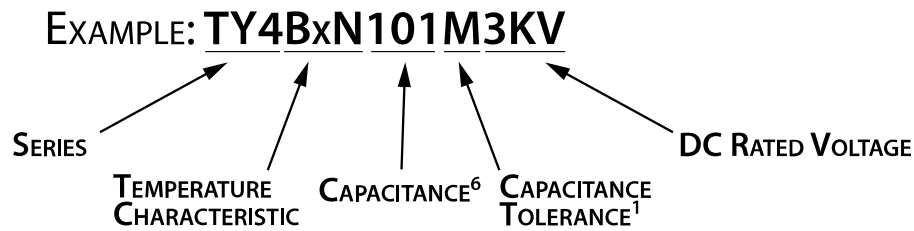




**BxN TYPICAL TEMPERATURE AND DISSIPATION CHARACTERISTICS CURVE**



### 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.

