



Press Release

Nippon Chemi-Con Corporation
October 5, 2021

Product Line Expansion of Multilayer Ceramic Capacitors

Nippon Chemi-Con has expanded its product line of multilayer ceramic capacitors: SMD type NTF Series, NTS Series, and metal cap type NTJ Series.

◆SMD Type NTF Series, NTS Series

We will expand product capacitance range by adding products with improved capacitance density to our 25V to 100V rated voltage range products.

Conventionally, the NTF Series and NTS Series had a lineup of 25 to 250V rated voltage products which are widely used in industrial equipment, power supplies and telecommunications applications.

In recent years, there has been an increasing demand for higher capacitance in such applications. To meet these demands, we have adopted our proprietary dielectric material and developed new manufacturing processes, improving capacitance density. Improved capacitance density enables downsizing of existing products with the same capacitance.

Main Specifications

Temperature characteristics	X7R、X7S
Category temperature range	-55°C to +125°C
Rated voltage	25Vdc to 100Vdc
Rated capacitance range	3.3μF to 47μF
Rated capacitance tolerance	±20%(M), ±10%(K)
Endurance	Guarantees 1,000 hours at 125°C, rated voltage
Case size	Refer to Table 1, 2

Table 1. Capacitance expansion range, size - NTF Series

Voltage (V)	Capacitance (μF)		Size (mm)		
	Existing	New	L	W	Tmax.
25	3.3	10	3.2±0.3	1.6±0.2	1.8
	10	22	3.2±0.4	2.5±0.3	2.6
50	2.2	3.3, 4.7	3.2±0.3	1.6±0.2	1.8
	4.7	10	3.2±0.4	2.5±0.3	2.6
100	6.8	10	4.5±0.4	3.2±0.4	2.8
	10	15, 22	5.7±0.4	5.0±0.4	2.8

Table 2. Capacitance expansion range, size - NTS Series

Voltage (V)	Capacitance (μF)		Size (mm)		
	Existing	New	L	W	Tmax.
25	3.3	10	3.2 \pm 0.2	1.6 \pm 0.2	1.8
	10	22	3.2 \pm 0.4	2.5 \pm 0.3	2.6
50	2.2	3.3, 4.7	3.2 \pm 0.3	1.6 \pm 0.2	1.8
	4.7	10	3.2 \pm 0.4	2.5 \pm 0.3	2.6
100	6.8	10	4.5 \pm 0.4	3.2 \pm 0.4	2.8
	10	15, 22	5.7 \pm 0.4	5.0 \pm 0.4	2.8

Samples

Available from October 2021

Mass Production

Mass production is scheduled to start in April 2022 at Chemi-Con Yamagata Corp. Nagai Plant (a wholly owned subsidiary of Nippon Chemi-Con)

◆Metal cap type NTJ Series

We will expand product voltage range by adding 500V rated voltage products. The NTJ Series has improved resistance to substrate bending by securing elements with metal caps. Our metal cap type products are capable of suppressing heat generation during use to a relatively small amount.

Conventionally, we have lined up 25V to 250V rated voltage products. They are widely used in automotive electronics, industrial equipment, medical equipment, power supplies and telecommunications devices.

In recent years, there has been an increasing demand for higher voltage resistance in such applications. To meet these demands, we have adopted our proprietary dielectric material and developed new manufacturing processes, achieving higher voltage resistance.

Main Specifications

Temperature characteristics	X7R
Category temperature range	-55°C to +125°C
Rated voltage	500Vdc
Rated capacitance range	1 μF to 2.4 μF
Rated capacitance tolerance	\pm 20%(M)
Endurance	Guarantees 1,000 hours at 125°C, rated voltage
Case size	Refer to Table 3

Table 3. Capacitance, size

Voltage (V)	Capacitance (μF)	Size (mm)		
		L	W	Tmax.
500	1	6.0 \pm 0.4	5.3 \pm 0.4	6.0
	1.2	6.0 \pm 0.4	5.3 \pm 0.4	6.5
	2	7.8 \pm 0.5	6.6 \pm 0.5	7.0
	2.4	7.8 \pm 0.5	6.6 \pm 0.5	7.5

Samples

Available from November 2021

Mass Production

Mass production is scheduled to begin in February 2022 at Chemi-Con Yamagata Corp. Nagai Plant (a wholly owned subsidiary of Nippon Chemi-Con)

Product Appearance

◆SMD type NTF Series, NTS Series



◆Metal cap type NTJ Series

