



# Press Release

Nippon Chemi-Con Corporation  
September 21, 2016

## High Withstand Voltage Multilayer Ceramic Capacitors NTS/NTF/NTD Series

### Commercialization of 500V rated voltage, high-capacitance products

Nippon Chemi-Con has added 500V rated voltage products to SMD type multilayer ceramic capacitors NTS/NTF Series and radial lead type multilayer ceramic capacitors NTD Series.

Conventionally, the NTS/NTF/NTD Series consisted of 25V to 250V rated voltage products. They are widely used in industrial equipment, power supplies and telecommunications applications.

In recent years, demand for capacitors for high-voltage circuits has increased in such applications. In addition, demand for replacement of film capacitors is increasing in view of high temperature life and downsizing of parts.

To meet these requirements, we have developed a new manufacturing process using dielectric material developed in-house and made use under high voltage possible, as well as achieving higher capacitance. By doing so, we have commercialized products with a rated voltage of 500V.

#### [Main Specifications]

- Temperature characteristic: X7R
- Category temperature range: -55°C to +125°C
- Rated voltage: 500 Vdc
- Rated capacitance range: 0.47 $\mu$ F to 1.2 $\mu$ F
- Rated capacitance tolerance:  $\pm$ 20% (M)
- Endurance: guarantees 1,000 hours at 125°C/rated voltage
- Case size: Refer to the table below.

Unit: mm

Rated capacitance	Radial lead type			SMD type					
	NTD Series			NTS Series			NTF Series		
	Lmax	Wmax	Tmax	L	W	Tmax	L	W	Tmax
0.47 $\mu$ F	7.5	9.0	3.5	5.7 $\pm$ 0.4	5.0 $\pm$ 0.4	2.7	5.7 $\pm$ 0.4	5.0 $\pm$ 0.4	2.7
0.56 $\mu$ F			3.5			3.0			3.0
0.68 $\mu$ F	10.0	11.5	3.4	7.5 $\pm$ 0.5	6.3 $\pm$ 0.5	2.5			
1.0 $\mu$ F			3.8			3.2			
1.2 $\mu$ F			4.2			3.5			

#### [Production]

Mass production started at Chemi-Con Yamagata Corp. (a wholly owned subsidiary of Nippon Chemi-Con Corp.) from May 2016.

[Product Appearance]

