

NIC PRODUCT PROFILE

NMC High Cap Series

High Capacitance MLCC Capacitors

DESCRIPTION:

High Capacitance multilayer (MLCC) construction ceramic chip capacitors offer an extended range of capacitance values from 1uF to 100uF in X7R, X5R, and Y5V temperature coefficients.

CHARACTERISTICS:

Temperature Range : -30°C ~ +85°C
-55°C ~ +125°C

Capacitance : 1.0uF ~ 100uF

Tolerance : ±10%, ±20%, +80%/-20%

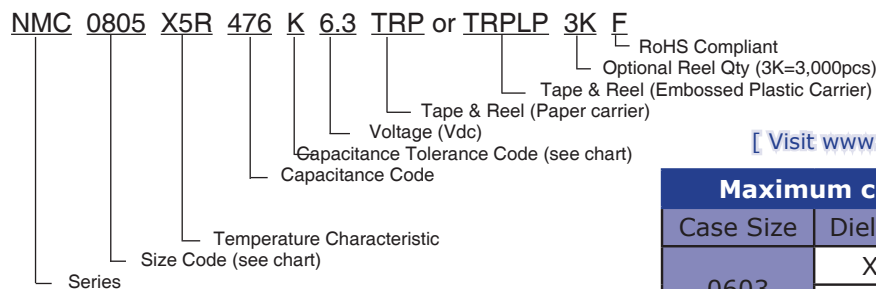
Rated Voltage: 4Vdc ~ 100Vdc

Sizes: 0402 ~ 2225

TRENDS:

With higher operating frequencies, reduction in size, less weight, and the need for increased performance at a lower cost, are fueling demand for higher capacitance MLCC components. The higher reliability, lower ESR and impedance characteristics of MLCCs can now be used where higher capacitance values are required.

PART NUMBERING SYSTEM:



NIC Specification Data Sheet @ <http://www.niccomp.com/catalog/nmhc.pdf>



www.NICcomp.com/QK

Key Parameters - Substitutes & Selling Tips

+ MLCC Capacitors vs. other Capacitor Technologies

- Size - following trend to reach higher CV values in smaller case sizes NIC offers 0402 and 0603 Sizes up to 22uF
- ESR & Impedance - MLCC construction offers the lowest ESR and impedances versus other technologies
- High Frequency Performance (Lower ESL than E-Cap Types)

+ MLCC Substitutes and Selling Tips

- Temperature Coefficient - X7R replaces X5R replaces Y5V. X5R provides highest Cap value with stability in temperature

[Visit www.niccomp.com for more information]

[Visit www.NICcomp.com For Performance Data]

Maximum capacitance per case size and TC			
Case Size	Dielectric	Max Cap	Voltage
0603	X7R	2.2µF (225)	16V
	X5R	22µF (226)	2.5V
0805	X7R	4.7µF (475)	10V
	X5R	47µF (476)	6.3V
1206	X7R	22µF (226)	6.3V
	X5R	100µF (107)	6.3V
1210	X7R	10µF (106)	35V
	X5R	100µF (107)	6.3V
1808	X7R	2.2µF (225)	35V
1812	X7R	10µF (106)	25V
	X5R	47µF (476)	6.3V

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