



[www.niccomp.com/pcn](http://www.niccomp.com/pcn) | Technical Support: [tpmq@niccomp.com](mailto:tpmq@niccomp.com)



Issued: May 15<sup>th</sup> 2015

SUB: EOL Notice

Product Type: Automotive Grade Ceramic Chip Capacitors

NIC Series: NMA Series

Product Specification: [www.niccomp.com/catalog/nma.pdf](http://www.niccomp.com/catalog/nma.pdf)

Notification: End of Life (See EOL PNs, see Table #1 below)

The following is notice of end of life, for NMA Series products, which include below NPO, X7R, X7S part numbers as shown in Table 1 below.

Last Order Date: November 15<sup>th</sup> 2015 for existing business from established customers

Last Ship Date: May 15<sup>th</sup> 2016 for existing business from established customers

Reason for Discontinuation: Replaced with cost effective NMC-A series automotive grade MLCCs

**Table #1 – EOL PNs sorted by Case Size, TCC, Voltage Rating**

EOL Part Numbers	TCC	Case Size	Voltage Rating	Capacitance Value
NMA0402NPO4R7C50C10KR55QYF	NPO	0402	50V	4.7pF
NMA0402NPO6R8D50C10KR55QYF	NPO	0402	50V	6.8pF
NMA0402NPO100J50C10KR55QYF	NPO	0402	50V	10pF
NMA0402NPO120J50C10KR55QYF	NPO	0402	50V	12pF
NMA0402NPO150J50C10KR55QYF	NPO	0402	50V	15pF
NMA0402NPO180J50C10KR55QYF	NPO	0402	50V	18pF
NMA0402NPO220J50C10KR55QYF	NPO	0402	50V	22pF
NMA0402NPO270J50C10KR55QYF	NPO	0402	50V	27pF
NMA0402NPO330J50C10KR55QYF	NPO	0402	50V	33pF
NMA0402NPO390J50C10KR55QYF	NPO	0402	50V	39pF
NMA0402NPO470J50C10KR55QYF	NPO	0402	50V	47pF
NMA0402NPO560J50C10KR55QYF	NPO	0402	50V	56pF
NMA0402NPO680J50C10KR55QYF	NPO	0402	50V	68pF
NMA0402NPO820J50C10KR55QYF	NPO	0402	50V	82pF
NMA0402NPO101J50C10KR55QYF	NPO	0402	50V	100pF
NMA0402NPO121J50C10KR55QYF	NPO	0402	50V	120pF
NMA0402NPO151J50C10KR55QYF	NPO	0402	50V	150pF
NMA0402NPO181J50C10KR55QYF	NPO	0402	50V	180pF
NMA0402NPO221J50C10KR55QYF	NPO	0402	50V	220pF
NMA0402NPO471J50C10KR55QYF	NPO	0402	50V	470pF
NMA0402NPO4R7C100C10KR55QYF	NPO	0402	100V	4.7pF
NMA0402NPO6R8C100D10KR55QYF	NPO	0402	100V	6.8pF
NMA0402NPO100J100C10KR55QYF	NPO	0402	100V	10pF
NMA0402NPO120J100C10KR55QYF	NPO	0402	100V	12pF
NMA0402NPO150J100C10KR55QYF	NPO	0402	100V	15pF
NMA0402NPO180J100C10KR55QYF	NPO	0402	100V	18pF
NMA0402NPO220J100C10KR55QYF	NPO	0402	100V	22pF
NMA0402NPO270J100C10KR55QYF	NPO	0402	100V	27pF
NMA0402NPO330J100C10KR55QYF	NPO	0402	100V	33pF
NMA0402NPO390J100C10KR55QYF	NPO	0402	100V	39pF



NIC Components Corp.

[www.niccomp.com/pcn](http://www.niccomp.com/pcn) | Technical Support: [tpmq@niccomp.com](mailto:tpmq@niccomp.com)

EOL Part Numbers	TCC	Case Size	Voltage Rating	Capacitance Value
NMA0402NPO470J100C10KR55QYF	NPO	0402	100V	47pF
NMA0402NPO560J100C10KR55QYF	NPO	0402	100V	56pF
NMA0402NPO680J100C10KR55QYF	NPO	0402	100V	68pF
NMA0402NPO820J100C10KR55QYF	NPO	0402	100V	82pF
NMA0402NPO101J100C10KR55QYF	NPO	0402	100V	100pF
NMA-P0402X7R102K16C10KR55QYF	X7R	0402	16V	0.001uF
NMA-P0402X7R152K16C10KR55QYF	X7R	0402	16V	0.0015uF
NMA-P0402X7R222K16C10KR55QYF	X7R	0402	16V	0.0022uF
NMA-P0402X7R332K16C10KR55QYF	X7R	0402	16V	0.0033uF
NMA-P0402X7R472K16C10KR55QYF	X7R	0402	16V	0.0047uF
NMA-P0402X7R682K16C10KR55QYF	X7R	0402	16V	0.0068uF
NMA-P0402X7R103K16C10KR55QYF	X7R	0402	16V	0.01uF
NMA-P0402X7R153K16C10KR55QYF	X7R	0402	16V	0.015uF
NMA-P0402X7R223K16C10KR55QYF	X7R	0402	16V	0.022uF
NMA-P0402X7R273K16C10KR55QYF	X7R	0402	16V	0.027uF
NMA-P0402X7R333K16C10KR55QYF	X7R	0402	16V	0.033uF
NMA-P0402X7R473K16C10KR55QYF	X7R	0402	16V	0.047uF
NMA-P0402X7R683K16C10KR55QYF	X7R	0402	16V	0.068uF
NMA-P0402X7R104K16C10KR55QYF	X7R	0402	16V	0.1uF
NMA-P0402X7R102K25C10KR55QYF	X7R	0402	25V	0.001uF
NMA-P0402X7R152K25C10KR55QYF	X7R	0402	25V	0.0015uF
NMA-P0402X7R222K25C10KR55QYF	X7R	0402	25V	0.0022uF
NMA-P0402X7R332K25C10KR55QYF	X7R	0402	25V	0.0033uF
NMA-P0402X7R472K25C10KR55QYF	X7R	0402	25V	0.0047uF
NMA-P0402X7R682K25C10KR55QYF	X7R	0402	25V	0.0068uF
NMA-P0402X7R103K25C10KR55QYF	X7R	0402	25V	0.01uF
NMA-P0402X7R153K25C10KR55QYF	X7R	0402	25V	0.015uF
NMA-P0402X7R223K25C10KR55QYF	X7R	0402	25V	0.022uF
NMA-P0402X7R333K25C10KR55QYF	X7R	0402	25V	0.033uF
NMA-P0402X7R271K50C10KR55QYF	X7R	0402	50V	270pF
NMA-P0402X7R331K50C10KR55QYF	X7R	0402	50V	330pF
NMA-P0402X7R471K50C10KR55QYF	X7R	0402	50V	470pF
NMA-P0402X7R681K50C10KR55QYF	X7R	0402	50V	680pF
NMA-P0402X7R821K50C10KR55QYF	X7R	0402	50V	820pF
NMA-P0402X7R102K50C10KR55QYF	X7R	0402	50V	0.001uF
NMA-P0402X7R152K50C10KR55QYF	X7R	0402	50V	0.0015uF
NMA-P0402X7R222K50C10KR55QYF	X7R	0402	50V	0.0022uF
NMA-P0402X7R272K50C10KR55QYF	X7R	0402	50V	0.0027uF
NMA-P0402X7R332K50C10KR55QYF	X7R	0402	50V	0.0033uF
NMA-P0402X7R472K50C10KR55QYF	X7R	0402	50V	0.0047uF
NMA-P0402X7R682K50C10KR55QYF	X7R	0402	50V	0.0068uF
NMA-P0402X7R103K50C10KR55QYF	X7R	0402	50V	0.01uF
NMA-P0402X7R153K50C10KR55QYF	X7R	0402	50V	0.015uF
NMA-P0402X7R223K50C10KR55QYF	X7R	0402	50V	0.022uF



NIC Components Corp.

[www.niccomp.com/pcn](http://www.niccomp.com/pcn) | Technical Support: [tpmq@niccomp.com](mailto:tpmq@niccomp.com)

EOL Part Numbers	TCC	Case Size	Voltage Rating	Capacitance Value
NMA0603NPO4R7C50C4KR90QYF	NPO	0603	50V	4.7pF
NMA0603NPO5R6C50C4KR90QYF	NPO	0603	50V	5.6pF
NMA0603NPO6R8D50C4KR90QYF	NPO	0603	50V	6.8pF
NMA0603NPO8R2D50C4KR90QYF	NPO	0603	50V	8.2pF
NMA0603NPO100J50C4KR90QYF	NPO	0603	50V	10pF
NMA0603NPO120J50C4KR90QYF	NPO	0603	50V	12pF
NMA0603NPO150J50C4KR90QYF	NPO	0603	50V	15pF
NMA0603NPO180J50C4KR90QYF	NPO	0603	50V	18pF
NMA0603NPO220J50C4KR90QYF	NPO	0603	50V	22pF
NMA0603NPO270J50C4KR90QYF	NPO	0603	50V	27pF
NMA0603NPO330J50C4KR90QYF	NPO	0603	50V	33pF
NMA0603NPO390J50C4KR90QYF	NPO	0603	50V	39pF
NMA0603NPO470J50C4KR90QYF	NPO	0603	50V	47pF
NMA0603NPO560J50C4KR90QYF	NPO	0603	50V	56pF
NMA0603NPO680J50C4KR90QYF	NPO	0603	50V	68pF
NMA0603NPO820J50C4KR90QYF	NPO	0603	50V	82pF
NMA0603NPO101J50C4KR90QYF	NPO	0603	50V	100pF
NMA0603NPO121J50C4KR90QYF	NPO	0603	50V	120pF
NMA0603NPO151J50C4KR90QYF	NPO	0603	50V	150pF
NMA0603NPO181J50C4KR90QYF	NPO	0603	50V	180pF
NMA0603NPO221J50C4KR90QYF	NPO	0603	50V	220pF
NMA0603NPO271J50C4KR90QYF	NPO	0603	50V	270pF
NMA0603NPO331J50C4KR90QYF	NPO	0603	50V	330pF
NMA0603NPO391J50C4KR90QYF	NPO	0603	50V	390pF
NMA0603NPO471J50C4KR90QYF	NPO	0603	50V	470pF
NMA0603NPO561J50C4KR90QYF	NPO	0603	50V	560pF
NMA0603NPO681J50C4KR90QYF	NPO	0603	50V	680pF
NMA0603NPO821J50C4KR90QYF	NPO	0603	50V	820pF
NMA0603NPO102J50C4KR90QYF	NPO	0603	50V	0.001uF
NMA0603NPO4R7C100C4KR90QYF	NPO	0603	100	4.7pF
NMA0603NPO6R8D100C4KR90QYF	NPO	0603	100	6.8pF
NMA0603NPO100J100C4KR90QYF	NPO	0603	100	10pF
NMA0603NPO120J100C4KR90QYF	NPO	0603	100	12pF
NMA0603NPO150J100C4KR90QYF	NPO	0603	100	15pF
NMA0603NPO180J100C4KR90QYF	NPO	0603	100	18pF
NMA0603NPO220J100C4KR90QYF	NPO	0603	100	22pF
NMA0603NPO270J100C4KR90QYF	NPO	0603	100	27pF
NMA0603NPO330J100C4KR90QYF	NPO	0603	100	33pF
NMA0603NPO390J100C4KR90QYF	NPO	0603	100	39pF
NMA0603NPO470J100C4KR90QYF	NPO	0603	100	47pF
NMA0603NPO560J100C4KR90QYF	NPO	0603	100	56pF
NMA0603NPO680J100C4KR90QYF	NPO	0603	100	68pF
NMA0603NPO820J100C4KR90QYF	NPO	0603	100	82pF
NMA0603NPO101J100C4KR90QYF	NPO	0603	100	100pF



NIC Components Corp.

[www.niccomp.com/pcn](http://www.niccomp.com/pcn) | Technical Support: [tpmq@niccomp.com](mailto:tpmq@niccomp.com)

EOL Part Numbers	TCC	Case Size	Voltage Rating	Capacitance Value
NMA-P0603X7R154K16C4KR90QYF	X7R	0603	16V	0.15uF
NMA-P0603X7R224K16C4KR90QYF	X7R	0603	16V	0.22uF
NMA-P0603X7R334K16C4KR90QYF	X7R	0603	16V	0.33uF
NMA-P0603X7R474K16C4KR90QYF	X7R	0603	16V	0.47uF
NMA-P0603X7R684K16C4KR90QYF	X7R	0603	16V	0.68uF
NMA-P0603X7R105K16C4KR90QYF	X7R	0603	16V	1uF
NMA-P0603X7R154K25C4KR90QYF	X7R	0603	25V	0.15uF
NMA-P0603X7R224K25C4KR90QYF	X7R	0603	25V	0.22uF
NMA-P0603X7R334K25C4KR90QYF	X7R	0603	25V	0.33uF
NMA-P0603X7R474K25C4KR90QYF	X7R	0603	25V	0.47uF
NMA-S0603X7R473K16C4KR90QYF	X7R	0603	16V	0.047uF
NMA-S0603X7R683K16C4KR90QYF	X7R	0603	16V	0.068uF
NMA-S0603X7R823K16C4KR90QYF	X7R	0603	16V	0.082uF
NMA-S0603X7R104K16C4KR90QYF	X7R	0603	16V	0.1uF
NMA-S0603X7R103K25C4KR90QYF	X7R	0603	25V	0.01uF
NMA-S0603X7R153K25C4KR90QYF	X7R	0603	25V	0.015uF
NMA-S0603X7R223K25C4KR90QYF	X7R	0603	25V	0.022uF
NMA-S0603X7R333K25C4KR90QYF	X7R	0603	25V	0.033uF
NMA-S0603X7R473K25C4KR90QYF	X7R	0603	25V	0.047uF
NMA-S0603X7R683K25C4KR90QYF	X7R	0603	25V	0.068uF
NMA-S0603X7R104K25C4KR90QYF	X7R	0603	25V	0.1uF
NMA-S0603X7R221K50C4KR90QYF	X7R	0603	50V	220pF
NMA-S0603X7R471K50C4KR90QYF	X7R	0603	50V	470pF
NMA-S0603X7R102K50C4KR90QYF	X7R	0603	50V	0.001uF
NMA-S0603X7R152K50C4KR90QYF	X7R	0603	50V	0.0015uF
NMA-S0603X7R222K50C4KR90QYF	X7R	0603	50V	0.0022uF
NMA-S0603X7R472K50C4KR90QYF	X7R	0603	50V	0.0047uF
NMA-S0603X7R562K50C4KR90QYF	X7R	0603	50V	0.0056uF
NMA-S0603X7R103K50C4KR90QYF	X7R	0603	50V	0.01uF
NMA-S0603X7R153K50C4KR90QYF	X7R	0603	50V	0.015uF
NMA-S0603X7R223K50C4KR90QYF	X7R	0603	50V	0.022uF
NMA-S0603X7R333K50C4KR90QYF	X7R	0603	50V	0.033uF
NMA-S0603X7R473K50C4KR90QYF	X7R	0603	50V	0.047uF
NMA-S0603X7R683K50C4KR90QYF	X7R	0603	50V	0.068uF
NMA-S0603X7R104K50C4KR90QYF	X7R	0603	50V	0.1uF
NMA-S0603X7R221K100C4KR90QYF	X7R	0603	100V	220pF
NMA-S0603X7R471K100C4KR90QYF	X7R	0603	100V	470pF
NMA-S0603X7R102K100C4KR90QYF	X7R	0603	100V	0.001uF
NMA-S0603X7R152K100C4KR90QYF	X7R	0603	100V	0.0015uF
NMA-S0603X7R222K100C4KR90QYF	X7R	0603	100V	0.0022uF
NMA-S0603X7R332K100C4KR90QYF	X7R	0603	100V	0.0033uF
NMA-S0603X7R472K100C4KR90QYF	X7R	0603	100V	0.0047uF
NMA-S0603X7R682K100C4KR90QYF	X7R	0603	100V	0.0068uF
NMA-S0603X7R103K100C4KR90QYF	X7R	0603	100V	0.01uF



NIC Components Corp.

[www.niccomp.com/pcn](http://www.niccomp.com/pcn) | Technical Support: [tpmq@niccomp.com](mailto:tpmq@niccomp.com)

EOL Part Numbers	TCC	Case Size	Voltage Rating	Capacitance Value
NMA0805NPO100J50C4KR70QYF	NPO	0805	50V	10pF
NMA0805NPO120J50C4KR70QYF	NPO	0805	50V	12pF
NMA0805NPO150J50C4KR70QYF	NPO	0805	50V	15pF
NMA0805NPO180J50C4KR70QYF	NPO	0805	50V	18pF
NMA0805NPO220J50C4KR70QYF	NPO	0805	50V	22pF
NMA0805NPO330J50C4KR70QYF	NPO	0805	50V	33pF
NMA0805NPO390J50C4KR70QYF	NPO	0805	50V	39pF
NMA0805NPO470J50C4KR70QYF	NPO	0805	50V	47pF
NMA0805NPO560J50C4KR70QYF	NPO	0805	50V	56pF
NMA0805NPO680J50C4KR70QYF	NPO	0805	50V	68pF
NMA0805NPO820J50C4KR70QYF	NPO	0805	50V	82pF
NMA0805NPO101J50C4KR70QYF	NPO	0805	50V	100pF
NMA0805NPO121J50C4KR70QYF	NPO	0805	50V	120pF
NMA0805NPO151J50C4KR70QYF	NPO	0805	50V	150pF
NMA0805NPO221J50C4KR70QYF	NPO	0805	50V	220pF
NMA0805NPO271J50C4KR70QYF	NPO	0805	50V	270pF
NMA0805NPO331J50C4KR70QYF	NPO	0805	50V	330pF
NMA0805NPO471J50C4KR95QYF	NPO	0805	50V	470pF
NMA0805NPO561J50C4KR95QYF	NPO	0805	50V	560pF
NMA0805NPO681J50C4KR95QYF	NPO	0805	50V	680pF
NMA0805NPO821J50C4KR95QYF	NPO	0805	50V	820pF
NMA0805NPO102J50C4KR95QYF	NPO	0805	50V	0.001uF
NMA0805NPO102J50E2K135QYF	NPO	0805	50V	0.001uF
NMA0805NPO122J50C4KR95QYF	NPO	0805	50V	0.0012uF
NMA0805NPO122J50E2K135QYF	NPO	0805	50V	0.0012uF
NMA0805NPO152J50C4KR95QYF	NPO	0805	50V	0.0015uF
NMA0805NPO152J50E2K135QYF	NPO	0805	50V	0.0015uF
NMA0805NPO182J50C4KR95QYF	NPO	0805	50V	0.0018uF
NMA0805NPO182J50E2K135QYF	NPO	0805	50V	0.0018uF
NMA0805NPO222J50C4KR95QYF	NPO	0805	50V	0.0022uF
NMA0805NPO222J50E2K135QYF	NPO	0805	50V	0.0022uF
NMA0805NPO272J50C4KR95QYF	NPO	0805	50V	0.0027uF
NMA0805NPO272J50E2K135QYF	NPO	0805	50V	0.0027uF
NMA0805NPO332J50C4KR95QYF	NPO	0805	50V	0.0033uF
NMA0805NPO332J50E2K135QYF	NPO	0805	50V	0.0033uF
NMA0805NPO392J50C4KR95QYF	NPO	0805	50V	0.0039uF
NMA0805NPO392J50E2K135QYF	NPO	0805	50V	0.0039uF
NMA0805NPO472J50C4KR95QYF	NPO	0805	50V	0.0047uF
NMA0805NPO472J50E2K135QYF	NPO	0805	50V	0.0047uF
NMA0805NPO562J50C4KR95QYF	NPO	0805	50V	0.0056uF
NMA0805NPO562J50E2K135QYF	NPO	0805	50V	0.0056uF
NMA0805NPO682J50E2K135QYF	NPO	0805	50V	0.0068uF
NMA0805NPO822J50E2K135QYF	NPO	0805	50V	0.0082uF
NMA0805NPO103J50E2K135QYF	NPO	0805	50V	0.01uF
NMA0805NPO100J100C4KR70QYF	NPO	0805	100V	10pF
NMA0805NPO120J100C4KR70QYF	NPO	0805	100V	12pF



NIC Components Corp.

[www.niccomp.com/pcn](http://www.niccomp.com/pcn) | Technical Support: [tpmq@niccomp.com](mailto:tpmq@niccomp.com)

EOL Part Numbers	TCC	Case Size	Voltage Rating	Capacitance Value
NMA0805NPO150J100C4KR70QYF	NPO	0805	100V	15pF
NMA0805NPO180J100C4KR70QYF	NPO	0805	100V	18pF
NMA0805NPO220J100C4KR70QYF	NPO	0805	100V	22pF
NMA0805NPO270J100C4KR70QYF	NPO	0805	100V	27pF
NMA0805NPO330J100C4KR70QYF	NPO	0805	100V	33pF
NMA0805NPO390J100C4KR70QYF	NPO	0805	100V	39pF
NMA0805NPO470J100C4KR70QYF	NPO	0805	100V	47pF
NMA0805NPO560J100C4KR70QYF	NPO	0805	100V	56pF
NMA0805NPO680J100C4KR70QYF	NPO	0805	100V	68pF
NMA0805NPO820J100C4KR70QYF	NPO	0805	100V	82pF
NMA0805NPO101J100C4KR70QYF	NPO	0805	100V	100pF
NMA0805NPO121J100C4KR70QYF	NPO	0805	100V	120pF
NMA0805NPO151J100C4KR70QYF	NPO	0805	100V	150pF
NMA0805NPO181J100C4KR70QYF	NPO	0805	100V	180pF
NMA0805NPO221J100C4KR70QYF	NPO	0805	100V	220pF
NMA0805NPO271J100C4KR70QYF	NPO	0805	100V	270pF
NMA0805NPO331J100C4KR70QYF	NPO	0805	100V	330pF
NMA0805NPO391J100C4KR70QYF	NPO	0805	100V	390pF
NMA0805NPO471J100C4KR95QYF	NPO	0805	100V	470pF
NMA0805NPO561J100C4KR95QYF	NPO	0805	100V	560pF
NMA0805NPO681J100C4KR95QYF	NPO	0805	100V	680pF
NMA0805NPO821J100C4KR95QYF	NPO	0805	100V	820pF
NMA0805NPO102J100C4KR95QYF	NPO	0805	100V	1000pF
NMA0805NPO102J100E2K135QYF	NPO	0805	100V	1000pF
NMA-P0805X7R335K10E2K140QYF	X7R	0805	10V	3.3uF
NMA-P0805X7R475K10E2K140QYF	X7R	0805	10V	4.7uF
NMA-P0805X7R154K16E2K135QYF	X7R	0805	16V	0.15uF
NMA-P0805X7R224K16E2K135QYF	X7R	0805	16V	0.22uF
NMA-P0805X7R334K16E2K135QYF	X7R	0805	16V	0.33uF
NMA-P0805X7R474K16E2K135QYF	X7R	0805	16V	0.47uF
NMA-P0805X7R684K16E2K135QYF	X7R	0805	16V	0.68uF
NMA-P0805X7R105K16E2K135QYF	X7R	0805	16V	1uF
NMA-P0805X7R225K16E2K135QYF	X7R	0805	16V	2.2uF
NMA-P0805X7R475K16E2K140QYF	X7R	0805	16V	4.7uF
NMA-P0805X7R154K25E2K135QYF	X7R	0805	25V	0.15uF
NMA-P0805X7R224K25E2K135QYF	X7R	0805	25V	0.22uF
NMA-P0805X7R334K25E2K135QYF	X7R	0805	25V	0.33uF
NMA-P0805X7R474K25E2K135QYF	X7R	0805	25V	0.47uF
NMA-P0805X7R684K25E2K135QYF	X7R	0805	25V	0.68uF
NMA-P0805X7R105K25E2K135QYF	X7R	0805	25V	1uF
NMA-P0805X7R475K25E2K140QYF	X7R	0805	25V	4.7uF
NMA-P0805X7R154K50E2K135QYF	X7R	0805	50V	0.15uF
NMA-P0805X7R224K50E2K135QYF	X7R	0805	50V	0.22uF
NMA-P0805X7R334K50E2K135QYF	X7R	0805	50V	0.33uF
NMA-P0805X7R474K50E2K135QYF	X7R	0805	50V	0.47uF



NIC Components Corp.

[www.niccomp.com/pcn](http://www.niccomp.com/pcn) | Technical Support: [tpmq@niccomp.com](mailto:tpmq@niccomp.com)

EOL Part Numbers	TCC	Case Size	Voltage Rating	Capacitance Value
NMA-P0805X7R105K50E2K135QYF	X7R	0805	50V	1uF
NMA-S0805X7R104K16C4KR95QYF	X7R	0805	16V	0.1uF
NMA-S0805X7R473K25C4KR95QYF	X7R	0805	25V	0.047uF
NMA-S0805X7R683K25C4KR95QYF	X7R	0805	25V	0.068uF
NMA-S0805X7R104K25C4KR95QYF	X7R	0805	25V	0.1uF
NMA-S0805X7R102K50C4KR70QYF	X7R	0805	50V	0.001uF
NMA-S0805X7R222K50C4KR70QYF	X7R	0805	50V	0.0022uF
NMA-S0805X7R472K50C4KR70QYF	X7R	0805	50V	0.0047uF
NMA-S0805X7R103K50C4KR70QYF	X7R	0805	50V	0.01uF
NMA-S0805X7R153K50C4KR70QYF	X7R	0805	50V	0.015uF
NMA-S0805X7R223K50C4KR70QYF	X7R	0805	50V	0.022uF
NMA-S0805X7R333K50C4KR95QYF	X7R	0805	50V	0.033uF
NMA-S0805X7R473K50C4KR95QYF	X7R	0805	50V	0.047uF
NMA-S0805X7R683K50C4KR95QYF	X7R	0805	50V	0.068uF
NMA-S0805X7R104K50C4KR95QYF	X7R	0805	50V	0.1uF
NMA-S0805X7R104K50E2K135QYF	X7R	0805	50V	0.1uF
NMA-S0805X7R102K100C4KR70QYF	X7R	0805	100V	0.001uF
NMA-S0805X7R152K100C4KR70QYF	X7R	0805	100V	0.0015uF
NMA-S0805X7R222K100C4KR70QYF	X7R	0805	100V	0.0022uF
NMA-S0805X7R472K100C4KR70QYF	X7R	0805	100V	0.0047uF
NMA-S0805X7R103K100C4KR70QYF	X7R	0805	100V	0.01uF
NMA-S0805X7R153K100C4KR70QYF	X7R	0805	100V	0.015uF
NMA-S0805X7R223K100C4KR70QYF	X7R	0805	100V	0.022uF
NMA-S0805X7R333K100C4KR95QYF	X7R	0805	100V	0.033uF
NMA-S0805X7R473K100C4KR95QYF	X7R	0805	100V	0.047uF
NMA-S0805X7R683K100C4KR95QYF	X7R	0805	100V	0.068uF
NMA-S0805X7R104K100C4KR95QYF	X7R	0805	100V	0.1uF
NMA-S0805X7R104K100E2K135QYF	X7R	0805	100V	0.1uF
NMA-P0805X7S106K6.3E2K140QYF	X7S	0805	6.3V	10uF
NMA-P1206X7R106K6.3E2K180QYF	X7R	1206	6.3V	10uF
NMA-P1206X7R106K10E2K180QYF	X7R	1206	10V	10uF
NMA-P1206X7R155K16E2K180QYF	X7R	1206	16V	1.5uF
NMA-P1206X7R225K16E2K180QYF	X7R	1206	16V	2.2uF
NMA-P1206X7R335K16E2K180QYF	X7R	1206	16V	3.3uF
NMA-P1206X7R475K16E2K180QYF	X7R	1206	16V	4.7uF
NMA-P1206X7R106K16E2K180QYF	X7R	1206	16V	10uF
NMA-P1206X7R475K25E2K180QYF	X7R	1206	25V	4.7uF
NMA-P1206X7R225K50E2K180QYF	X7R	1206	50V	2.2uF
NMA-S1206X7R105K25E2K125QYF	X7R	1206	25V	1uF
NMA-S1206X7R104K50E2K125QYF	X7R	1206	50V	0.1uF
NMA-S1206X7R224K50E2K125QYF	X7R	1206	50V	0.22uF
NMA-S1206X7R334K50E2K180QYF	X7R	1206	50V	0.33uF
NMA-S1206X7R474K50E2K180QYF	X7R	1206	50V	0.47uF
NMA-S1206X7R105K50E2K180QYF	X7R	1206	50V	1uF



[www.niccomp.com/pcn](http://www.niccomp.com/pcn) | Technical Support: [tpmg@niccomp.com](mailto:tpmg@niccomp.com)

EOL Part Numbers	TCC	Case Size	Voltage Rating	Capacitance Value
NMA-S1206X7R104K100E2K125QYF	X7R	1206	100V	0.1uF
NMA-P1210X7R226M16E1K270QYF	X7R	1210	16V	22uF
NMA-P1210X7R226K16E1K270QYF	X7R	1210	16V	22uF
NMA-P1210X7R475K50E1K270QYF	X7R	1210	50V	4.7uF
NMA-P1210X7S106K25E1K270QYF	X7S	1210	25V	10uF
NMA-P1210X7S685K50E1K270QYF	X7S	1210	50V	6.8uF
NMA-P1210X7S106K50E1K270QYF	X7S	1210	50V	10uF

Prepared by: Technical Product Marketing Group / [tpmg@niccomp.com](mailto:tpmg@niccomp.com)

➔ Follow NIC PCN alerts to get email notifications of EOL and PCN announcements at [www.niccomp.com/pcn](http://www.niccomp.com/pcn)



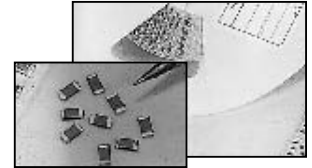
# Automotive Grade Ceramic Chip Capacitors

NMA Series

## FEATURES

- MANUFACTURED AT ISO/TS 16949 PR
- AEC-Q200 QUALIFIED
- SURFACE MOUNT CASE SIZES 0402, 0
- AVAILABLE IN NPO, X7R & X7S DIELEC
- AVAILABLE WITH FLEX TERMINATION CONSTRUCTION

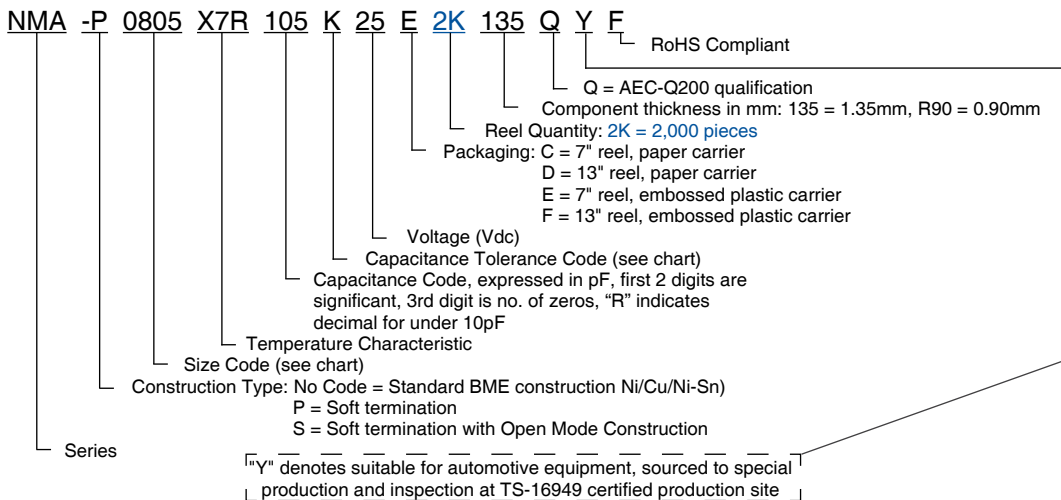
**EOL**  
**End Of Life**  
Ref#: MAY1515.188



## CHARACTERISTICS

Type	NPO	X7R	X7S
Capacitance Range	4.7pF ~ 0.01μF	220pF ~ 22μF	6.8μF ~ 10μF
Capacitance Tolerance	≤6.8pF: C (±0.25pF), 6.8pF ~ <10pF: D (±0.5pF), ≥10pF: J (±5%)	±10% (K)	±10% (K)
Operating Temperature Range	-55°C ~ +125°C	-55°C ~ +125°C	-55°C ~ +125°C
Temperature Characteristics	0±30 ppm/°C	±15%	±22%
Rated Voltages	50V & 100V	10V, 16V, 25V, 50V & 100V	6.3V, 25V & 50V
Q Factor	Cap. ≥30pF: Q = 1,000 min. Cap. <30pF: Q = 400 +20xC	-	-
Dissipation Factor	-	10V 5%, 16V 3.5%, ≥25V 2.5% max.	12.5% max.
Insulation Resistance @ 25°C @ ≤ Rated Voltage for 60 Sec.	100,000MΩ or 1,000MΩ • μF Whichever is less	10,000MΩ or 500MΩ • μF Whichever is less	
Insulation Resistance @ 125°C @ ≤ Rated Voltage for 60 Sec.	10,000MΩ or 100MΩ • μF Whichever is less	1,000MΩ or 10MΩ • μF Whichever is less	
Dielectric Withstanding Voltage	250% of rated voltage for 1-5 sec, 50mA current maximum		
Test Conditions (EIA-198-2E)	≤1000pF (1MHz±10%), 0.5-5Vrms >1000pF (1KHz ±10%), 1.0Vrms ± 0.2Vrms	≤10μF 1KHz, 1.0V ±0.2Vrms >10μF 120Hz 0.5V ±0.1Vrms	1KHz, 1.0V ±0.2Vrms

## PART NUMBER SYSTEM

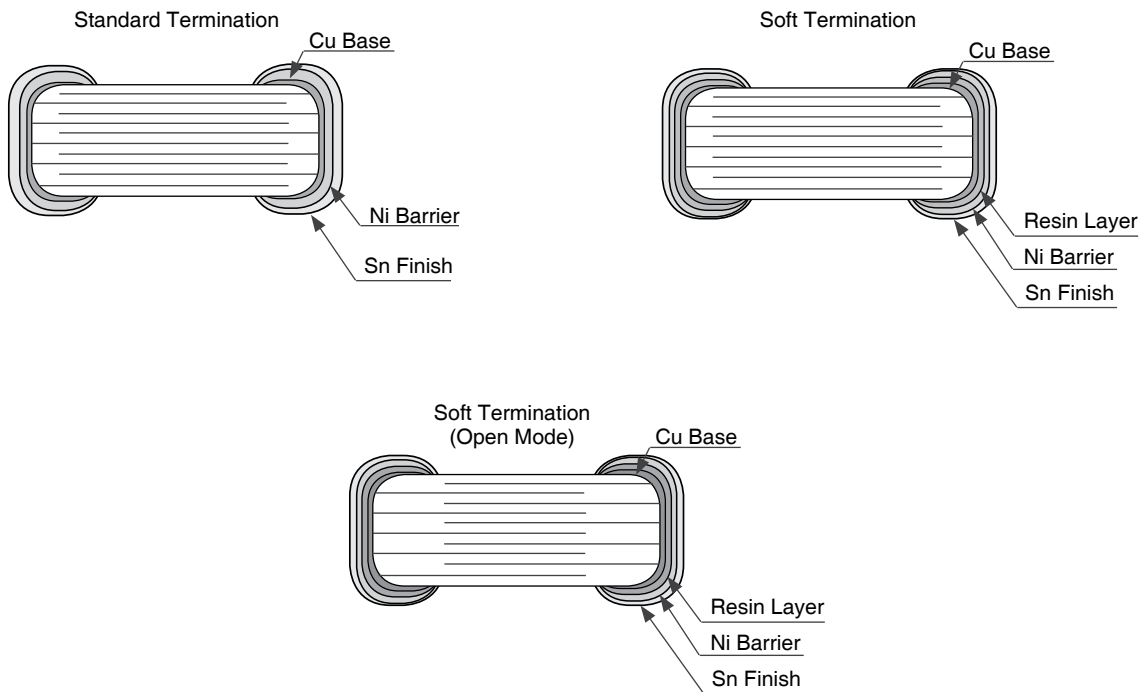


## AVAILABLE TERMINATION TYPES

Case Size	NPO	X7R	X7S
0402	Standard	Soft	n/a
0603	Standard	Soft & Soft (Open Mode)	n/a
0805	Standard	Soft & Soft (Open Mode)	Soft
1206	n/a	Soft & Soft (Open Mode)	n/a
1210	n/a	Soft	Soft

## PCB FLEX SPECIFICATION (AEC Q-200-005)

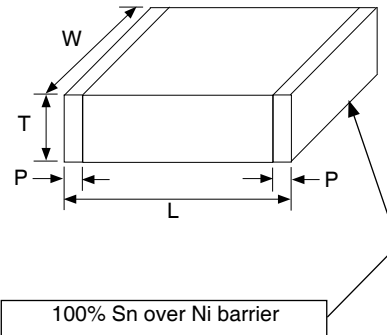
Case Size	NPO (Standard Terminations)	X7R/X7S (Soft Terminations)
0402	3mm ( $\Delta C \pm 5\%$ or 0.5pF whichever is greater)	3mm ( $\Delta C \pm 10\%$ max.)
0603		
0805		
1206/1210	n/a	



## 0402 NPO Standard Terminations

EIA Case Size	NPO 0402 Standard Terminations			
Length (L)	1.0 ± 0.05			
Width (W)	0.5 ± 0.05			
Termination Width (P)	0.2 +0.15/-0.10			
Part Number	Capacitance (pF)	Voltage (VDC)	Tolerance	Maximum Thickness
NMA0402NPO4R7C50C10KR55QYF	4.7	50V	±0.25pF	0.55
NMA0402NPO6R8D50C10KR55QYF	6.8	50V	±0.5pF	0.55
NMA0402NPO100J50C10KR55QYF	10	50V	±5%	0.55
NMA0402NPO120J50C10KR55QYF	12	50V	±5%	0.55
NMA0402NPO150J50C10KR55QYF	15	50V	±5%	0.55
NMA0402NPO180J50C10KR55QYF	18	50V	±5%	0.55
NMA0402NPO220J50C10KR55QYF	22	50V	±5%	0.55
NMA0402NPO270J50C10KR55QYF	27	50V	±5%	0.55
NMA0402NPO330J50C10KR55QYF	33	50V	±5%	0.55
NMA0402NPO390J50C10KR55QYF	39	50V	±5%	0.55
NMA0402NPO470J50C10KR55QYF	47	50V	±5%	0.55
NMA0402NPO560J50C10KR55QYF	56	50V	±5%	0.55
NMA0402NPO680J50C10KR55QYF	68	50V	±5%	0.55
NMA0402NPO820J50C10KR55QYF	82	50V	±5%	0.55
NMA0402NPO101J50C10KR55QYF	100	50V	±5%	0.55
NMA0402NPO121J50C10KR55QYF	120	50V	±5%	0.55
NMA0402NPO151J50C10KR55QYF	150	50V	±5%	0.55
NMA0402NPO181J50C10KR55QYF	180	50V	±5%	0.55
NMA0402NPO221J50C10KR55QYF	220	50V	±5%	0.55
NMA0402NPO471J50C10KR55QYF	470	50V	±5%	0.55
NMA0402NPO4R7C100C10KR55QYF	4.7	100V	±0.25pF	0.55
NMA0402NPO6R8C100D10KR55QYF	6.8	100V	±0.5pF	0.55
NMA0402NPO100J100C10KR55QYF	10	100V	±5%	0.55
NMA0402NPO120J100C10KR55QYF	12	100V	±5%	0.55
NMA0402NPO150J100C10KR55QYF	15	100V	±5%	0.55
NMA0402NPO180J100C10KR55QYF	18	100V	±5%	0.55
NMA0402NPO220J100C10KR55QYF	22	100V	±5%	0.55
NMA0402NPO270J100C10KR55QYF	27	100V	±5%	0.55
NMA0402NPO330J100C10KR55QYF	33	100V	±5%	0.55
NMA0402NPO390J100C10KR55QYF	39	100V	±5%	0.55
NMA0402NPO470J100C10KR55QYF	47	100V	±5%	0.55
NMA0402NPO560J100C10KR55QYF	56	100V	±5%	0.55
NMA0402NPO680J100C10KR55QYF	68	100V	±5%	0.55
NMA0402NPO820J100C10KR55QYF	82	100V	±5%	0.55
NMA0402NPO101J100C10KR55QYF	100	100V	±5%	0.55

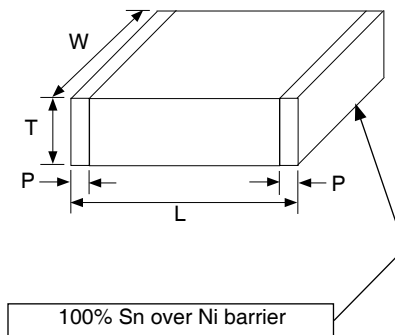
(CONSULT FACTORY FOR CAPACITANCE VALUES NOT LISTED)



### 0402 X7R Soft Terminations

EIA Case Size	X7R 0402 Soft Termination			
Length (L)	1.0 ± 0.05			
Width (W)	0.5 ± 0.05			
Termination Width (P)	0.2 +0.15/-0.10			
Part Number	Capacitance	Voltage (VDC)	Tolerance	Maximum Thickness
NMA-P0402X7R102K16C10KR55QYF	0.001µF	16 V	±10%	0.55
NMA-P0402X7R152K16C10KR55QYF	0.0015µF	16 V	±10%	0.55
NMA-P0402X7R222K16C10KR55QYF	0.0022µF	16 V	±10%	0.55
NMA-P0402X7R332K16C10KR55QYF	0.0033µF	16 V	±10%	0.55
NMA-P0402X7R472K16C10KR55QYF	0.0047µF	16 V	±10%	0.55
NMA-P0402X7R682K16C10KR55QYF	0.0068µF	16 V	±10%	0.55
NMA-P0402X7R103K16C10KR55QYF	0.01µF	16 V	±10%	0.55
NMA-P0402X7R153K16C10KR55QYF	0.015µF	16 V	±10%	0.55
NMA-P0402X7R223K16C10KR55QYF	0.022µF	16 V	±10%	0.55
NMA-P0402X7R273K16C10KR55QYF	0.027µF	16 V	±10%	0.55
NMA-P0402X7R333K16C10KR55QYF	0.033µF	16 V	±10%	0.55
NMA-P0402X7R473K16C10KR55QYF	0.047µF	16 V	±10%	0.55
NMA-P0402X7R683K16C10KR55QYF	0.068µF	16 V	±10%	0.55
NMA-P0402X7R104K16C10KR55QYF	0.1µF	16 V	±10%	0.55
NMA-P0402X7R102K25C10KR55QYF	0.001µF	25V	±10%	0.55
NMA-P0402X7R152K25C10KR55QYF	0.0015µF	25V	±10%	0.55
NMA-P0402X7R222K25C10KR55QYF	0.0022µF	25V	±10%	0.55
NMA-P0402X7R332K25C10KR55QYF	0.0033µF	25V	±10%	0.55
NMA-P0402X7R472K25C10KR55QYF	0.0047µF	25V	±10%	0.55
NMA-P0402X7R682K25C10KR55QYF	0.0068µF	25V	±10%	0.55
NMA-P0402X7R103K25C10KR55QYF	0.01µF	25V	±10%	0.55
NMA-P0402X7R153K25C10KR55QYF	0.015µF	25V	±10%	0.55
NMA-P0402X7R223K25C10KR55QYF	0.022µF	25V	±10%	0.55
NMA-P0402X7R333K25C10KR55QYF	0.033µF	25V	±10%	0.55
NMA-P0402X7R271K50C10KR55QYF	270pF	50V	±10%	0.55
NMA-P0402X7R331K50C10KR55QYF	330pF	50V	±10%	0.55
NMA-P0402X7R471K50C10KR55QYF	470pF	50V	±10%	0.55
NMA-P0402X7R681K50C10KR55QYF	680pF	50V	±10%	0.55
NMA-P0402X7R821K50C10KR55QYF	820pF	50V	±10%	0.55
NMA-P0402X7R102K50C10KR55QYF	0.001µF	50V	±10%	0.55
NMA-P0402X7R152K50C10KR55QYF	0.0015µF	50V	±10%	0.55
NMA-P0402X7R222K50C10KR55QYF	0.0022µF	50V	±10%	0.55
NMA-P0402X7R272K50C10KR55QYF	0.0027µF	50V	±10%	0.55
NMA-P0402X7R332K50C10KR55QYF	0.0033µF	50V	±10%	0.55
NMA-P0402X7R472K50C10KR55QYF	0.0047µF	50V	±10%	0.55
NMA-P0402X7R682K50C10KR55QYF	0.0068µF	50V	±10%	0.55
NMA-P0402X7R103K50C10KR55QYF	0.01µF	50V	±10%	0.55
NMA-P0402X7R153K50C10KR55QYF	0.015µF	50V	±10%	0.55
NMA-P0402X7R223K50C10KR55QYF	0.022µF	50V	±10%	0.55

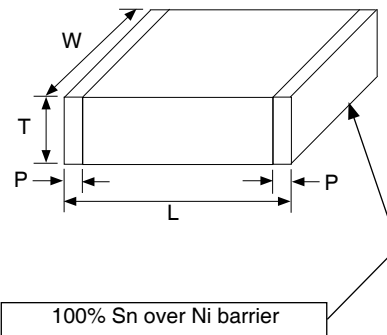
(CONSULT FACTORY FOR CAPACITANCE VALUES NOT LISTED)



## 0603 NPO Standard Terminations

EIA Case Size	NPO 0603 - Standard Termination			
Length (L)	1.6 ± 0.10			
Width (W)	0.8 ± 0.10			
Termination Width (P)	0.3 ± 0.20			
Part Number	Capacitance	Voltage (VDC)	Tolerance	Maximum Thickness
NMA0603NPO4R7C50C4KR90QYF	4.7pF	50V	±0.25pF	0.90
NMA0603NPO5R6C50C4KR90QYF	5.6pF	50V	±0.25pF	0.90
NMA0603NPO6R8D50C4KR90QYF	6.8pF	50V	±0.5pF	0.90
NMA0603NPO8R2D50C4KR90QYF	8.2pF	50V	±0.5pF	0.90
NMA0603NPO100J50C4KR90QYF	10pF	50V	±5%	0.90
NMA0603NPO120J50C4KR90QYF	12pF	50V	±5%	0.90
NMA0603NPO150J50C4KR90QYF	15pF	50V	±5%	0.90
NMA0603NPO180J50C4KR90QYF	18pF	50V	±5%	0.90
NMA0603NPO220J50C4KR90QYF	22pF	50V	±5%	0.90
NMA0603NPO270J50C4KR90QYF	27pF	50V	±5%	0.90
NMA0603NPO330J50C4KR90QYF	33pF	50V	±5%	0.90
NMA0603NPO390J50C4KR90QYF	39pF	50V	±5%	0.90
NMA0603NPO470J50C4KR90QYF	47pF	50V	±5%	0.90
NMA0603NPO560J50C4KR90QYF	56pF	50V	±5%	0.90
NMA0603NPO680J50C4KR90QYF	68pF	50V	±5%	0.90
NMA0603NPO820J50C4KR90QYF	82pF	50V	±5%	0.90
NMA0603NPO101J50C4KR90QYF	100pF	50V	±5%	0.90
NMA0603NPO121J50C4KR90QYF	120pF	50V	±5%	0.90
NMA0603NPO151J50C4KR90QYF	150pF	50V	±5%	0.90
NMA0603NPO181J50C4KR90QYF	180pF	50V	±5%	0.90
NMA0603NPO221J50C4KR90QYF	220pF	50V	±5%	0.90
NMA0603NPO271J50C4KR90QYF	270pF	50V	±5%	0.90
NMA0603NPO331J50C4KR90QYF	330pF	50V	±5%	0.90
NMA0603NPO391J50C4KR90QYF	390pF	50V	±5%	0.90
NMA0603NPO471J50C4KR90QYF	470pF	50V	±5%	0.90
NMA0603NPO561J50C4KR90QYF	560pF	50V	±5%	0.90
NMA0603NPO681J50C4KR90QYF	680pF	50V	±5%	0.90
NMA0603NPO821J50C4KR90QYF	820pF	50V	±5%	0.90
NMA0603NPO102J50C4KR90QYF	0.001µF	50V	±5%	0.90
NMA0603NPO4R7C100C4KR90QYF	4.7pF	100 V	±0.25pF	0.90
NMA0603NPO6R8D100C4KR90QYF	6.8pF	100 V	±0.5pF	0.90
NMA0603NPO100J100C4KR90QYF	10pF	100 V	±5%	0.90
NMA0603NPO120J100C4KR90QYF	12pF	100 V	±5%	0.90
NMA0603NPO150J100C4KR90QYF	15pF	100 V	±5%	0.90
NMA0603NPO180J100C4KR90QYF	18pF	100 V	±5%	0.90
NMA0603NPO220J100C4KR90QYF	22pF	100 V	±5%	0.90
NMA0603NPO270J100C4KR90QYF	27pF	100 V	±5%	0.90
NMA0603NPO330J100C4KR90QYF	33pF	100 V	±5%	0.90
NMA0603NPO390J100C4KR90QYF	39pF	100 V	±5%	0.90
NMA0603NPO470J100C4KR90QYF	47pF	100 V	±5%	0.90
NMA0603NPO560J100C4KR90QYF	56pF	100 V	±5%	0.90
NMA0603NPO680J100C4KR90QYF	68pF	100 V	±5%	0.90
NMA0603NPO820J100C4KR90QYF	82pF	100 V	±5%	0.90
NMA0603NPO101J100C4KR90QYF	100pF	100 V	±5%	0.90

(CONSULT FACTORY FOR CAPACITANCE VALUES NOT LISTED)



®

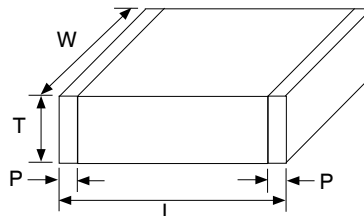
## 0603 X7R Soft Terminations

EIA Case Size	X7R 0603 - Soft Termination			
Length (L)	1.6 ± 0.10			
Width (W)	0.8 ± 0.10			
Termination Width (P)	0.3 ± 0.20			
Part Number	Capacitance (μF)	Voltage (VDC)	Tolerance	Maximum Thickness (mm)
NMA-P0603X7R154K16C4KR90QYF	0.15	16 V	±10%	0.90
NMA-P0603X7R224K16C4KR90QYF	0.22	16 V	±10%	0.90
NMA-P0603X7R334K16C4KR90QYF	0.33	16 V	±10%	0.90
NMA-P0603X7R474K16C4KR90QYF	0.47	16 V	±10%	0.90
NMA-P0603X7R684K16C4KR90QYF	0.68	16 V	±10%	0.90
NMA-P0603X7R105K16C4KR90QYF	1.0	16 V	±10%	0.90
NMA-P0603X7R154K25C4KR90QYF	0.15	25V	±10%	0.90
NMA-P0603X7R224K25C4KR90QYF	0.22	25V	±10%	0.90
NMA-P0603X7R334K25C4KR90QYF	0.33	25V	±10%	0.90
NMA-P0603X7R474K25C4KR90QYF	0.47	25V	±10%	0.90

## 0603 X7R Soft Terminations (Open Mode)

EIA Case Size	X7R 0603 - Soft Termination (Open Mode)			
Length (L)	1.6 ± 0.10			
Width (W)	0.8 ± 0.10			
Termination Width (P)	0.3 ± 0.20			
Part Number	Capacitance	Voltage (VDC)	Tolerance	Maximum Thickness (mm)
NMA-S0603X7R473K16C4KR90QYF	0.047μF	16 V	±10%	0.90
NMA-S0603X7R683K16C4KR90QYF	0.068μF	16 V	±10%	0.90
NMA-S0603X7R823K16C4KR90QYF	0.082μF	16 V	±10%	0.90
NMA-S0603X7R104K16C4KR90QYF	0.1μF	16 V	±10%	0.90
NMA-S0603X7R103K25C4KR90QYF	0.01μF	25V	±10%	0.90
NMA-S0603X7R153K25C4KR90QYF	0.015μF	25V	±10%	0.90
NMA-S0603X7R223K25C4KR90QYF	0.022μF	25V	±10%	0.90
NMA-S0603X7R333K25C4KR90QYF	0.033μF	25V	±10%	0.90
NMA-S0603X7R473K25C4KR90QYF	0.047μF	25V	±10%	0.90
NMA-S0603X7R683K25C4KR90QYF	0.068μF	25V	±10%	0.90
NMA-S0603X7R104K25C4KR90QYF	0.1μF	25V	±10%	0.90
NMA-S0603X7R221K50C4KR90QYF	220pF	50V	±10%	0.90
NMA-S0603X7R471K50C4KR90QYF	470pF	50V	±10%	0.90
NMA-S0603X7R102K50C4KR90QYF	0.001μF	50V	±10%	0.90
NMA-S0603X7R152K50C4KR90QYF	0.0015μF	50V	±10%	0.90
NMA-S0603X7R222K50C4KR90QYF	0.0022μF	50V	±10%	0.90
NMA-S0603X7R472K50C4KR90QYF	0.0047μF	50V	±10%	0.90
NMA-S0603X7R562K50C4KR90QYF	0.0056μF	50V	±10%	0.90
NMA-S0603X7R103K50C4KR90QYF	0.01μF	50V	±10%	0.90
NMA-S0603X7R153K50C4KR90QYF	0.015μF	50V	±10%	0.90
NMA-S0603X7R223K50C4KR90QYF	0.022μF	50V	±10%	0.90
NMA-S0603X7R333K50C4KR90QYF	0.033μF	50V	±10%	0.90
NMA-S0603X7R473K50C4KR90QYF	0.047μF	50V	±10%	0.90
NMA-S0603X7R683K50C4KR90QYF	0.068μF	50V	±10%	0.90
NMA-S0603X7R104K50C4KR90QYF	0.1μF	50V	±10%	0.90
NMA-S0603X7R221K100C4KR90QYF	220pF	100V	±10%	0.90
NMA-S0603X7R471K100C4KR90QYF	470pF	100V	±10%	0.90
NMA-S0603X7R102K100C4KR90QYF	0.001μF	100V	±10%	0.90
NMA-S0603X7R152K100C4KR90QYF	0.0015μF	100V	±10%	0.90
NMA-S0603X7R222K100C4KR90QYF	0.0022μF	100V	±10%	0.90
NMA-S0603X7R332K100C4KR90QYF	0.0033μF	100V	±10%	0.90
NMA-S0603X7R472K100C4KR90QYF	0.0047μF	100V	±10%	0.90
NMA-S0603X7R682K100C4KR90QYF	0.0068μF	100V	±10%	0.90
NMA-S0603X7R103K100C4KR90QYF	0.01μF	100V	±10%	0.90

(CONSULT FACTORY FOR CAPACITANCE VALUES NOT LISTED)

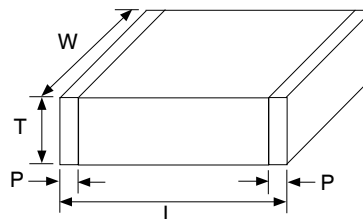


®

### 0805 NPO Standard Terminations

EIA Case Size	NPO 0805 Standard Termination			
Length (L)	2.0 ± 0.10			
Width (W)	1.25 ± 0.10			
Termination Width (P)	0.5 +0.20/-0.30			
Part Number	Capacitance	Voltage (VDC)	Tolerance	Maximum Thickness (mm)
NMA0805NPO100J50C4KR70QYF	10pF	50	±5%	0.70
NMA0805NPO120J50C4KR70QYF	12pF	50	±5%	0.70
NMA0805NPO150J50C4KR70QYF	15pF	50	±5%	0.70
NMA0805NPO180J50C4KR70QYF	18pF	50	±5%	0.70
NMA0805NPO220J50C4KR70QYF	22pF	50	±5%	0.70
NMA0805NPO330J50C4KR70QYF	33pF	50	±5%	0.70
NMA0805NPO390J50C4KR70QYF	39pF	50	±5%	0.70
NMA0805NPO470J50C4KR70QYF	47pF	50	±5%	0.70
NMA0805NPO560J50C4KR70QYF	56pF	50	±5%	0.70
NMA0805NPO680J50C4KR70QYF	68pF	50	±5%	0.70
NMA0805NPO820J50C4KR70QYF	82pF	50	±5%	0.70
NMA0805NPO101J50C4KR70QYF	100pF	50	±5%	0.70
NMA0805NPO121J50C4KR70QYF	120pF	50	±5%	0.70
NMA0805NPO151J50C4KR70QYF	150pF	50	±5%	0.70
NMA0805NPO221J50C4KR70QYF	220pF	50	±5%	0.70
NMA0805NPO271J50C4KR70QYF	270pF	50	±5%	0.70
NMA0805NPO331J50C4KR70QYF	330pF	50	±5%	0.70
NMA0805NPO471J50C4KR95QYF	470pF	50	±5%	0.95
NMA0805NPO561J50C4KR95QYF	560pF	50	±5%	0.95
NMA0805NPO681J50C4KR95QYF	680pF	50	±5%	0.95
NMA0805NPO821J50C4KR95QYF	820pF	50	±5%	0.95
NMA0805NPO102J50C4KR95QYF	0.001μF	50	±5%	0.95
NMA0805NPO102J50E2K135QYF	0.001μF	50	±5%	1.35
NMA0805NPO122J50C4KR95QYF	0.0012μF	50	±5%	0.95
NMA0805NPO122J50E2K135QYF	0.0012μF	50	±5%	1.35
NMA0805NPO152J50C4KR95QYF	0.0015μF	50	±5%	0.95
NMA0805NPO152J50E2K135QYF	0.0015μF	50	±5%	1.35
NMA0805NPO182J50C4KR95QYF	0.0018μF	50	±5%	0.95
NMA0805NPO182J50E2K135QYF	0.0018μF	50	±5%	1.35
NMA0805NPO222J50C4KR95QYF	0.0022μF	50	±5%	0.95
NMA0805NPO222J50E2K135QYF	0.0022μF	50	±5%	1.35
NMA0805NPO272J50C4KR95QYF	0.0027μF	50	±5%	0.95
NMA0805NPO272J50E2K135QYF	0.0027μF	50	±5%	1.35
NMA0805NPO332J50C4KR95QYF	0.0033μF	50	±5%	0.95
NMA0805NPO332J50E2K135QYF	0.0033μF	50	±5%	1.35
NMA0805NPO392J50C4KR95QYF	0.0039μF	50	±5%	0.95
NMA0805NPO392J50E2K135QYF	0.0039μF	50	±5%	1.35
NMA0805NPO472J50C4KR95QYF	0.0047μF	50	±5%	0.95
NMA0805NPO472J50E2K135QYF	0.0047μF	50	±5%	1.35
NMA0805NPO562J50C4KR95QYF	0.0056μF	50	±5%	0.95
NMA0805NPO562J50E2K135QYF	0.0056μF	50	±5%	1.35
NMA0805NPO682J50E2K135QYF	0.0068μF	50	±5%	1.35
NMA0805NPO822J50E2K135QYF	0.0082μF	50	±5%	1.35
NMA0805NPO103J50E2K135QYF	0.01μF	50	±5%	1.35
NMA0805NPO100J100C4KR70QYF	10pF	100	±5%	0.70
NMA0805NPO120J100C4KR70QYF	12pF	100	±5%	0.70
NMA0805NPO150J100C4KR70QYF	15pF	100	±5%	0.70
NMA0805NPO180J100C4KR70QYF	18pF	100	±5%	0.70

(CONSULT FACTORY  
FOR CAPACITANCE  
VALUES NOT LISTED)



®

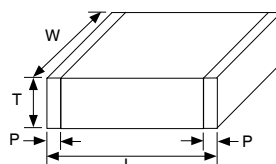
### 0805 NPO Standard Terminations

EIA Case Size	NPO 0805 Standard Termination			
Length (L)	2.0 ± 0.10			
Width (W)	1.25 ± 0.10			
Termination Width (P)	0.5 +0.20/-0.30			
Part Number	Capacitance (pF)	Voltage (VDC)	Tolerance	Maximum Thickness (mm)
NMA0805NPO220J100C4KR70QYF	22	100	±5%	0.70
NMA0805NPO270J100C4KR70QYF	27	100	±5%	0.70
NMA0805NPO330J100C4KR70QYF	33	100	±5%	0.70
NMA0805NPO390J100C4KR70QYF	39	100	±5%	0.70
NMA0805NPO470J100C4KR70QYF	47	100	±5%	0.70
NMA0805NPO560J100C4KR70QYF	56	100	±5%	0.70
NMA0805NPO680J100C4KR70QYF	68	100	±5%	0.70
NMA0805NPO820J100C4KR70QYF	82	100	±5%	0.70
NMA0805NPO101J100C4KR70QYF	100	100	±5%	0.70
NMA0805NPO121J100C4KR70QYF	120	100	±5%	0.70
NMA0805NPO151J100C4KR70QYF	150	100	±5%	0.70
NMA0805NPO181J100C4KR70QYF	180	100	±5%	0.70
NMA0805NPO221J100C4KR70QYF	220	100	±5%	0.70
NMA0805NPO271J100C4KR70QYF	270	100	±5%	0.70
NMA0805NPO331J100C4KR70QYF	330	100	±5%	0.70
NMA0805NPO391J100C4KR70QYF	390	100	±5%	0.70
NMA0805NPO471J100C4KR95QYF	470	100	±5%	0.95
NMA0805NPO561J100C4KR95QYF	560	100	±5%	0.95
NMA0805NPO681J100C4KR95QYF	680	100	±5%	0.95
NMA0805NPO821J100C4KR95QYF	820	100	±5%	0.95
NMA0805NPO102J100C4KR95QYF	1000	100	±5%	0.95
NMA0805NPO102J100E2K135QYF	1000	100	±5%	1.35

### 0805 X7R/X7S\* Soft Terminations

EIA Case Size	X7R/X7S* 0805 Soft Termination			
Length (L)	2.0 ± 0.10			
Width (W)	1.25 ± 0.10			
Termination Width (P)	0.5 +0.20/-0.30			
Part Number	Capacitance (µF)	Voltage (VDC)	Tolerance	Maximum Thickness (mm)
NMA-P0805X7S106K6.3E2K140QYF*	10	6.3V	±10%	1.40
NMA-P0805X7R335K10E2K140QYF	3.3	10V	±10%	1.40
NMA-P0805X7R475K10E2K140QYF	4.7	10V	±10%	1.40
NMA-P0805X7R154K16E2K135QYF	0.15	16V	±10%	1.35
NMA-P0805X7R224K16E2K135QYF	0.22	16V	±10%	1.35
NMA-P0805X7R334K16E2K135QYF	0.33	16V	±10%	1.35
NMA-P0805X7R474K16E2K135QYF	0.47	16V	±10%	1.35
NMA-P0805X7R684K16E2K135QYF	0.68	16V	±10%	1.35
NMA-P0805X7R105K16E2K135QYF	1.0	16V	±10%	1.35
NMA-P0805X7R225K16E2K135QYF	2.2	16V	±10%	1.35
NMA-P0805X7R475K16E2K140QYF	4.7	16V	±10%	1.40
NMA-P0805X7R154K25E2K135QYF	0.15	25V	±10%	1.35
NMA-P0805X7R224K25E2K135QYF	0.22	25V	±10%	1.35
NMA-P0805X7R334K25E2K135QYF	0.33	25V	±10%	1.35
NMA-P0805X7R474K25E2K135QYF	0.47	25V	±10%	1.35
NMA-P0805X7R684K25E2K135QYF	0.68	25V	±10%	1.35
NMA-P0805X7R105K25E2K135QYF	1.0	25V	±10%	1.35
NMA-P0805X7R475K25E2K140QYF	4.7	25V	±10%	1.40
NMA-P0805X7R154K50E2K135QYF	0.15	50V	±10%	1.35
NMA-P0805X7R224K50E2K135QYF	0.22	50V	±10%	1.35
NMA-P0805X7R334K50E2K135QYF	0.33	50V	±10%	1.35
NMA-P0805X7R474K50E2K135QYF	0.47	50V	±10%	1.35
NMA-P0805X7R105K50E2K135QYF	1.0	50V	±10%	1.35

(CONSULT FACTORY FOR CAPACITANCE VALUES NOT LISTED)



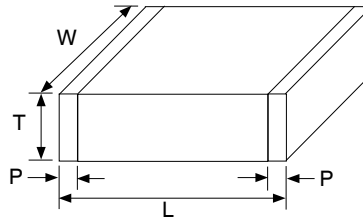
®



### 0805 X7R Soft Terminations (Open Mode)

EIA Case Size	X7R 0805 Soft Termination (Open Mode)			
Length (L)	2.0 ± 0.10			
Width (W)	1.25 ± 0.10			
Termination Width (P)	0.5 +0.20/-0.30			
Part Number	Capacitance (µF)	Voltage (VDC)	Tolerance	Maximum Thickness (mm)
NMA-S0805X7R104K16C4KR95QYF	0.1	16 V	±10%	0.95
NMA-S0805X7R473K25C4KR95QYF	0.047	25V	±10%	0.95
NMA-S0805X7R683K25C4KR95QYF	0.068	25V	±10%	0.95
NMA-S0805X7R104K25C4KR95QYF	0.1	25V	±10%	0.95
NMA-S0805X7R102K50C4KR70QYF	0.001	50V	±10%	0.70
NMA-S0805X7R222K50C4KR70QYF	0.0022	50V	±10%	0.70
NMA-S0805X7R472K50C4KR70QYF	0.0047	50V	±10%	0.70
NMA-S0805X7R103K50C4KR70QYF	0.01	50V	±10%	0.70
NMA-S0805X7R153K50C4KR70QYF	0.015	50V	±10%	0.70
NMA-S0805X7R223K50C4KR70QYF	0.022	50V	±10%	0.70
NMA-S0805X7R333K50C4KR95QYF	0.033	50V	±10%	0.95
NMA-S0805X7R473K50C4KR95QYF	0.047	50V	±10%	0.95
NMA-S0805X7R683K50C4KR95QYF	0.068	50V	±10%	0.95
NMA-S0805X7R104K50C4KR95QYF	0.1	50V	±10%	0.95
NMA-S0805X7R104K50E2K135QYF	0.1	50V	±10%	1.35
NMA-S0805X7R102K100C4KR70QYF	0.001	100V	±10%	0.70
NMA-S0805X7R152K100C4KR70QYF	0.0015	100V	±10%	0.70
NMA-S0805X7R222K100C4KR70QYF	0.0022	100V	±10%	0.70
NMA-S0805X7R472K100C4KR70QYF	0.0047	100V	±10%	0.70
NMA-S0805X7R103K100C4KR70QYF	0.01	100V	±10%	0.70
NMA-S0805X7R153K100C4KR70QYF	0.015	100V	±10%	0.70
NMA-S0805X7R223K100C4KR70QYF	0.022	100V	±10%	0.70
NMA-S0805X7R333K100C4KR95QYF	0.033	100V	±10%	0.95
NMA-S0805X7R473K100C4KR95QYF	0.047	100V	±10%	0.95
NMA-S0805X7R683K100C4KR95QYF	0.068	100V	±10%	0.95
NMA-S0805X7R104K100C4KR95QYF	0.1	100V	±10%	0.95
NMA-S0805X7R104K100E2K135QYF	0.1	100V	±10%	1.35

(CONSULT FACTORY FOR CAPACITANCE VALUES NOT LISTED)



### 1206 X7R Soft Terminations

EIA Case Size	X7R 1206 Soft Termination			
Length (L)	3.20 ± 0.20			
Width (W)	1.60 ± 0.20			
Termination Width (P)	0.5 ± 0.30			
Part Number	Capacitance (µF)	Voltage (VDC)	Tolerance	Maximum Thickness (mm)
NMA-P1206X7R106K6.3E2K180QYF	10	6.3V	±10%	1.80
NMA-P1206X7R106K10E2K180QYF	10	10V	±10%	1.80
NMA-P1206X7R155K16E2K180QYF	1.5	16V	±10%	1.80
NMA-P1206X7R225K16E2K180QYF	2.2	16V	±10%	1.80
NMA-P1206X7R335K16E2K180QYF	3.3	16V	±10%	1.80
NMA-P1206X7R475K16E2K180QYF	4.7	16V	±10%	1.80
NMA-P1206X7R106K16E2K180QYF	10	16V	±10%	1.80
NMA-P1206X7R475K25E2K180QYF	4.7	25V	±10%	1.80
NMA-P1206X7R225K50E2K180QYF	2.2	50V	±10%	1.80

(CONSULT FACTORY FOR CAPACITANCE VALUES NOT LISTED)

### 1206 X7R Soft Terminations (Open Mode)

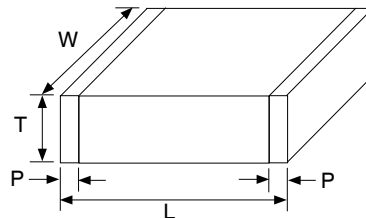
EIA Case Size	X7R 1206 Soft Termination			
Length (L)	3.20 ± 0.20			
Width (W)	1.60 ± 0.20			
Termination Width (P)	0.5 ± 0.30			
Part Number	Capacitance (µF)	Voltage (VDC)	Tolerance	Maximum Thickness (mm)
NMA-S1206X7R105K25E2K125QYF	1.0	25V	±10%	1.25
NMA-S1206X7R104K50E2K125QYF	0.1	50V	±10%	1.25
NMA-S1206X7R224K50E2K125QYF	0.22	50V	±10%	1.25
NMA-S1206X7R334K50E2K180QYF	0.33	50V	±10%	1.80
NMA-S1206X7R474K50E2K180QYF	0.47	50V	±10%	1.80
NMA-S1206X7R105K50E2K180QYF	1.0	50V	±10%	1.80
NMA-S1206X7R104K100E2K125QYF	0.1	100V	±10%	1.25

(CONSULT FACTORY FOR CAPACITANCE VALUES NOT LISTED)

### 1210 X7R/X7S\* Soft Terminations

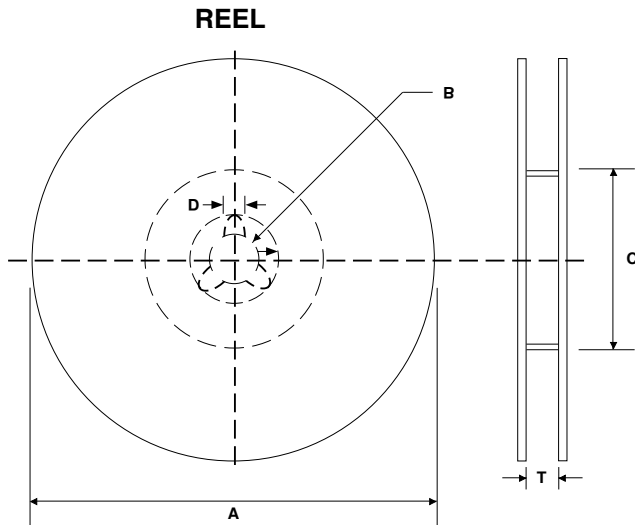
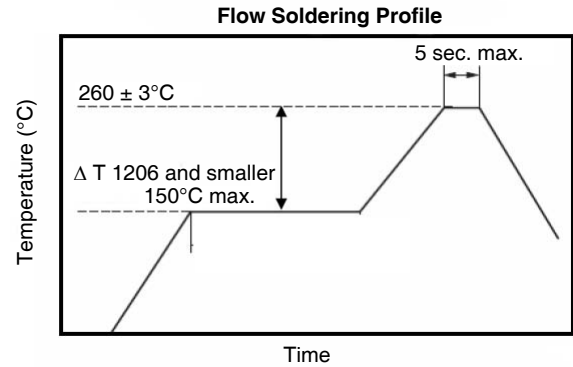
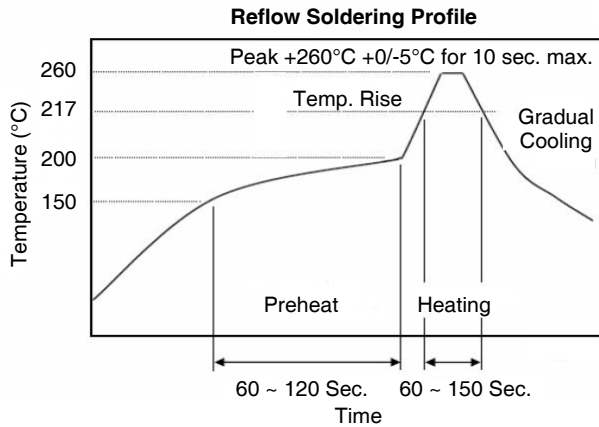
EIA Case Size	X7R/X7S* 1210 Soft Termination			
Length (L)	3.20 ± 0.20			
Width (W)	2.50 ± 0.20			
Termination Width (P)	0.6 ± 0.30			
Part Number	Capacitance (µF)	Voltage (VDC)	Tolerance	Maximum Thickness (mm)
NMA-P1210X7R226M16E1K270QYF	22	16V	±20%	2.70
NMA-P1210X7R226K16E1K270QYF	22	16V	±10%	2.70
NMA-P1210X7S106K25E1K270QYF*	10	25V	±10%	2.70
NMA-P1210X7R475K50E1K270QYF	4.7	50V	±10%	2.70
NMA-P1210X7S685K50E1K270QYF*	6.8	50V	±10%	2.70
NMA-P1210X7S106K50E1K270QYF*	10	50V	±10%	2.70

(CONSULT FACTORY FOR CAPACITANCE VALUES NOT LISTED)



## RECOMMENDED SOLDERING METHOD

Dielectric	Case Size	Capacitance Value	Soldering Method	
			Flow	Reflow
All	0402	All	-	○
NPO	≥0603	All	○	○
X7R/X7S	0603	All	○	○
	0805	All	○	○
	1206	All	○	○
	1210	All	-	○



### REEL DIMENSIONS (mm)

Reel Diameter (A)	B	C	D	T max.
7" (180 + 0/- 0.3)	13 ± 0.3	80 +1/-0	2.0 ± 0.5	9.0 ± 0.5
13" (330 + 0/- 0.3)				

### CARRIER TAPE MATERIAL

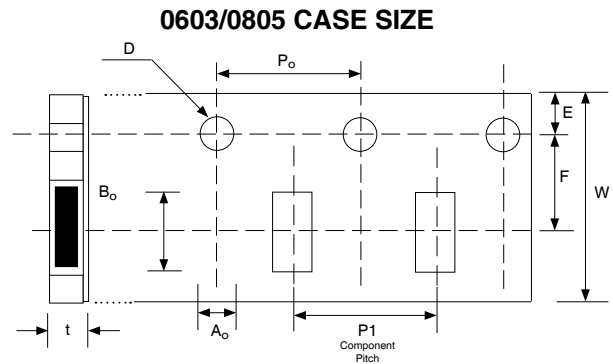
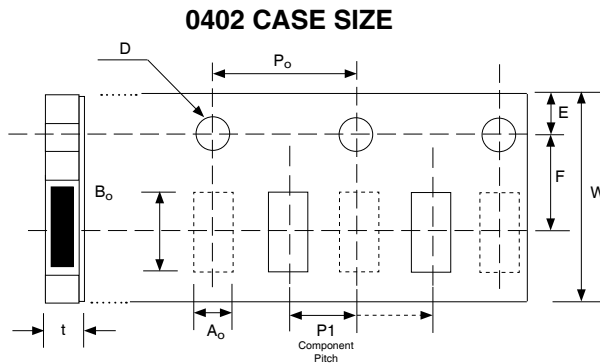
Parts with a thickness of ≥1mm will be taped on embossed plastic carrier. Parts with a thickness of less than 1mm will be taped on paper carrier

## REEL QUANTITIES

Reel Size	0402	0603	0805		1206		1210
			T ≤ 0.95mm	T ≥ 1.0mm	T < 1.6mm	T ≥ 1.6mm	2.7mm max.
7"	10,000	4,000	4,000	2,000	2,000	2,000	1,000
13"	50,000	10,000 or 15,000	10,000 or 15,000	10,000	10,000	8,000	4,000

## PUNCHED CARRIER TAPE DIMENSIONS (mm)

Type	A <sub>o</sub>	B <sub>o</sub>	W	F	E	P1	P0	D0	t max.	
0402	0.62 ± 0.04	1.12 ± 0.04	8.0 ± 0.3	3.5 ± 0.05	1.75 ± 0.1	2.0 ± 0.05	4.0 ± 0.1	4.0 ± 0.1	1.5 +0.1/-0.03	0.65
0603	1.1 ± 0.2	1.9 ± 0.2				4.0 ± 0.1				1.1
0805	1.6 ± 0.2	2.4 ± 0.2								
1206	2.0 ± 0.2	3.6 ± 0.2								



## EMBOSSED PLASTIC CARRIER TAPE DIMENSIONS (mm)

Type	A <sub>o</sub>	B <sub>o</sub>	W	F	E	P1	P0	D0	t <sub>1</sub>	t <sub>2</sub>
0805	1.45 ± 0.2	2.3 ± 0.2	8.0 ± 0.3	3.5 ± 0.05	1.75 ± 0.1	4.0 ± 0.1	4.0 ± 0.1	1.5 +0.1/-0.03	0.6 max.	2.9 max.
1206	1.9 ± 0.2	3.6 ± 0.2								
1210	2.8 ± 0.2	3.6 ± 0.2								

