



Issued: December 9th, 2022  
SUB: EOL Notice

Product Type: Surface Mount Aluminum Electrolytic Capacitors  
NIC Series: NACC Series  
Product Specification:  
<http://www.niccomp.com/products/catalog/nacc.pdf>

Notification: End of Life Notification

The following is notice of the end of life for the NACC series of surface mount, aluminum electrolytic capacitors. This end of life notification applies to all packaging variations.

Effective: December 9th, 2022  
Last Order Date: July 31st, 2023  
Last Ship Date: December 31st, 2023

Reason for Discontinuation: Low Demand  
Link to List of Part Numbers: [Part Number List \(Excel\)](#)

Discontinued Part Number	Capacitance	Voltage Rating	Case Size	Possible Alternate	Comment
NACC220M6.3V4X6.1TR13F	22	6.3	4X6.1	NACE220M6.3V4X5.5TR15F	Shorter Load Life
NACC470M6.3V5X6.1TR13F	47	6.3	5X6.1	NACE470M6.3V5X5.5TR13F	Shorter Load Life
NACC101M6.3V6.3X6.1TR13F	100	6.3	6.3X6.1	NACE101M6.3V6.3X5.5TR13F	Shorter Load Life
NACC221M6.3V6.3X8TR13F	220	6.3	6.3X8	NACE221M6.3V6.3X6.3TR15F	Shorter Load Life
NACC331M6.3V8X10.5TR13F	330	6.3	8X10.5	NACE331M6.3V8X6.5TR15F	Shorter Load Life
NACC102M6.3V10X10.5TR13F	102	6.3	10X10.5	NACE102M10V10X10.5TR15F	Shorter Load Life
NACC330M10V5X6.1TR13F	33	10	5X6.1	NACE330M10V5X5.5TR13F	Shorter Load Life
NACC221M10V8X10.5TR13F	220	10	8X10.5	NACE221M10V8X6.5TR15F	Shorter Load Life
NACC100M16V4X6.1TR13F	10	16	4X6.1	NACE100M16V4X5.5TR13F	Shorter Load Life
NACC220M16V5X6.1TR13F	22	16	5X6.1	NACE220M16V5X5.5TR13F	Shorter Load Life
NACC470M16V6.3X6.1TR13F	47	16	6.3X6.1	NACE470M16V6.3X5.5TR13F	Shorter Load Life
NACC101M16V6.3X8TR13F	100	16	6.3X8	NACE101M16V6.3X5.5TR13F	Shorter Load Life
NACC471M16V10X10.5TR13F	470	16	10X10.5	NACE471M25V10X10.5TR15F	Shorter Load Life
NACC330M25V6.3X6.1TR13F	33	25	6.3X6.1	NACE330M25V6.3X5.5TR13F	Shorter Load Life
NACC470M25V6.3X8TR13F	47	25	6.3X8	NACE470M25V6.3X6.3TR15F	Shorter Load Life
NACC101M25V8X10.5TR13F	100	25	8X10.5	NACE101M25V8X6.5TR15F	Shorter Load Life
NACC331M25V10X10.5TR13F	330	25	10X10.5	NACE331M35V10X10.5TR15F	Shorter Load Life
NACC4R7M35V4X6.1TR13F	4.7	35	4X6.1	NACE4R7M35V4X5.5TR13F	Shorter Load Life
NACC100M35V5X6.1TR13F	10	35	5X6.1	NACE100M35V5X5.5TR13F	Shorter Load Life
NACC220M35V6.3X6.1TR13F	22	35	6.3X6.1	NACE220M35V6.3X5.5TR13F	Shorter Load Life
NACC330M35V6.3X8TR13F	33	35	6.3X8	NACE330M35V6.3X6.3TR15F	Shorter Load Life
NACC221M35V10X10.5TR13F	220	35	10X10.5	NACE221M50V10X10.5TR15F	Shorter Load Life
NACC1R0M50V4X6.1TR13F	1	50	4X6.1	NACE1R0M50V4X5.5TR13F	Shorter Load Life
NACC2R2M50V4X6.1TR13F	2.2	50	4X6.1	NACE2R2M50V4X5.5TR13F	Shorter Load Life
NACC3R3M50V4X6.1TR13F	3.3	50	4X6.1	NACE3R3M50V4X5.5TR13F	Shorter Load Life
NACC4R7M50V5X6.1TR13F	4.7	50	5X6.1	NACE4R7M50V5X5.5TR13F	Shorter Load Life
NACC100M50V6.3X6.1TR13F	10	50	6.3X6.1	NACE100M50V6.3X5.5TR13F	Shorter Load Life
NACC220M50V6.3X8TR13F	22	50	6.3X8	NACE220M50V6.3X6.3TR15F	Shorter Load Life
NACC330M50V8X10.5TR13F	33	50	8X10.5	NACE330M50V8X6.5TR15F	Shorter Load Life
NACC470M50V8X10.5TR13F	47	50	8X10.5	NACE470M63V8X10.5TR15F	Shorter Load Life
NACC101M50V10X10.5TR13F	100	50	10X10.5	NACE101M63V10X10.5TR15F	Shorter Load Life
NACC220M6.3V4X6.1TR15F	22	6.3	4X6.1	NACE220M6.3V4X5.5TR15F	Shorter Load Life
NACC470M6.3V5X6.1TR15F	47	6.3	5X6.1	NACE470M6.3V5X5.5TR15F	Shorter Load Life
NACC101M6.3V6.3X6.1TR15F	100	6.3	6.3X6.1	NACE101M6.3V6.3X5.5TR15F	Shorter Load Life
NACC221M6.3V6.3X8TR15F	220	6.3	6.3X8	NACE221M6.3V6.3X6.3TR15F	Shorter Load Life
NACC331M6.3V8X10.5TR15F	330	6.3	8X10.5	NACE331M6.3V8X6.5TR15F	Shorter Load Life
NACC102M6.3V10X10.5TR15F	102	6.3	10X10.5	NACE102M10V10X10.5TR15F	Shorter Load Life



Discontinued Part Number	Capacitance	Voltage Rating	Case Size	Possible Alternate	Comment
NACC330M10V5X6.1TR15F	33	10	5X6.1	NACE330M10V5X5.5TR15F	Shorter Load Life
NACC221M10V8X10.5TR15F	220	10	8X10.5	NACE221M10V8X6.5TR15F	Shorter Load Life
NACC100M16V4X6.1TR15F	10	16	4X6.1	NACE100M16V4X5.5TR15F	Shorter Load Life
NACC220M16V5X6.1TR15F	22	16	5X6.1	NACE220M16V5X5.5TR15F	Shorter Load Life
NACC470M16V6.3X6.1TR15F	47	16	6.3X6.1	NACE470M16V6.3X5.5TR15F	Shorter Load Life
NACC101M16V6.3X8TR15F	100	16	6.3X8	NACE101M16V6.3X5.5TR15F	Shorter Load Life
NACC471M16V10X10.5TR15F	470	16	10X10.5	NACE471M25V10X10.5TR15F	Shorter Load Life
NACC330M25V6.3X6.1TR15F	33	25	6.3X6.1	NACE330M25V6.3X5.5TR15F	Shorter Load Life
NACC470M25V6.3X8TR15F	47	25	6.3X8	NACE470M25V6.3X6.3TR15F	Shorter Load Life
NACC101M25V8X10.5TR15F	100	25	8X10.5	NACE101M25V8X6.5TR15F	Shorter Load Life
NACC331M25V10X10.5TR15F	330	25	10X10.5	NACE331M35V10X10.5TR15F	Shorter Load Life
NACC4R7M35V4X6.1TR15F	4.7	35	4X6.1	NACE4R7M35V4X5.5TR15F	Shorter Load Life
NACC100M35V5X6.1TR15F	10	35	5X6.1	NACE100M35V5X5.5TR15F	Shorter Load Life
NACC220M35V6.3X6.1TR15F	22	35	6.3X6.1	NACE220M35V6.3X5.5TR15F	Shorter Load Life
NACC330M35V6.3X8TR15F	33	35	6.3X8	NACE330M35V6.3X6.3TR15F	Shorter Load Life
NACC221M35V10X10.5TR15F	220	35	10X10.5	NACE221M50V10X10.5TR15F	Shorter Load Life
NACC1R0M50V4X6.1TR15F	1	50	4X6.1	NACE1R0M50V4X5.5TR15F	Shorter Load Life
NACC2R2M50V4X6.1TR15F	2.2	50	4X6.1	NACE2R2M50V4X5.5TR15F	Shorter Load Life
NACC3R3M50V4X6.1TR15F	3.3	50	4X6.1	NACE3R3M50V4X5.5TR15F	Shorter Load Life
NACC4R7M50V5X6.1TR15F	4.7	50	5X6.1	NACE4R7M50V5X5.5TR15F	Shorter Load Life
NACC100M50V6.3X6.1TR15F	10	50	6.3X6.1	NACE100M50V6.3X5.5TR15F	Shorter Load Life
NACC220M50V6.3X8TR15F	22	50	6.3X8	NACE220M50V6.3X6.3TR15F	Shorter Load Life
NACC330M50V8X10.5TR15F	33	50	8X10.5	NACE330M50V8X6.5TR15F	Shorter Load Life
NACC470M50V8X10.5TR15F	47	50	8X10.5	NACE470M63V8X10.5TR15F	Shorter Load Life
NACC101M50V10X10.5TR15F	100	50	10X10.5	NACE101M63V10X10.5TR15F	Shorter Load Life

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# Surface Mount Aluminum Electrolytic Capacitors NACC Series

## FEATURES

- CYLINDRICAL V-CHIP CONSTRUCTION FOR SURFACE MOUNTING
- HIGH TEMPERATURE, EXTEND LIFE (5000 HOURS @ 105°C)
- 4X6.1mm ~ 10X10.5mm CASE SIZES
- DESIGNED FOR REFLOW SOLDERING

**RoHS  
Compliant**  
includes all homogeneous materials



## CHARACTERISTICS

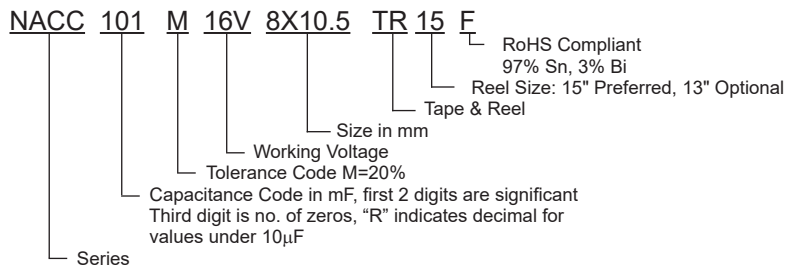
Rated Voltage Range	6.3 ~ 50Vdc						
Rate Capacitance Range	1.0 ~ 1,000μF						
Operating Temp. Range	-40°C ~ +105°C						
Capacitance Tolerance	±20% (M)						
Max. Leakage Current After 2 Minutes @ 20°C	0.01CV or 3μA whichever is greater						
Tan δ @120Hz/20°C	W.V. (Vdc)	6.3	10	16	25	35	50
	S.V.(Vdc)	8	13	20	32	44	63
	Tan δ	0.3*	0.26	0.20	0.16	0.14	0.12
		* 1,000μF is 0.5					
Load Life Test @ 105°C 4mm ~ 6mm Dia. 3,000hrs 8mm ~ 10mm Dia. 5,000hrs	Capacitance Change	Within ± 30% of initial measured value					
	Tan δ	Less than 300% of specified max. value					
	Leakage Current	Less than specified max. value					

\*See Part Number System for Details

## STANDARD PRODUCTS AND CASE SIZE TABLE D x L (mm)

Cap (μF)	Code	Working Voltage (Vdc)						
		6.3	10	16	25	35	50	
1.0	1R0	-	-	-	-	-	-	4X6.1
2.2	2R2	-	-	-	-	-	-	4X6.1
3.3	3R3	-	-	-	-	-	-	4X6.1
4.7	4R7	-	-	-	-	-	-	4X6.1 5X6.1
10	100	-	-	4X6.1	-	-	-	5X6.1 6.3X6.1
22	220	4X6.1	-	5X6.1	-	-	-	6.3X6.1 6.3X8
33	330	-	5X6.1	-	6.3X6.1	6.3X8	-	8X10.5
47	470	5X6.1	-	6.3X6.1	6.3X8	-	-	8X10.5
100	101	6.3X6.1	-	6.3X8	8X10.5	-	-	10X10.5
220	221	6.3X8	8X10.5	-	-	-	10X10.5	-
330	331	8X10.5	-	-	10X10.5	-	-	-
470	471	-	-	10X10.5	-	-	-	-
1000	102	10X10.5	-	-	-	-	-	-

## PART NUMBER SYSTEM



## PRECAUTIONS

Please review the notes on correct use, safety and precautions found at <https://www.niccomp.com/resource/files/aluminum/AlumApplInfoCautions.pdf>  
If in doubt or uncertainty, please review your specific application - process details with NIC's technical support personnel: [tpmg@niccomp.com](mailto:tpmg@niccomp.com)



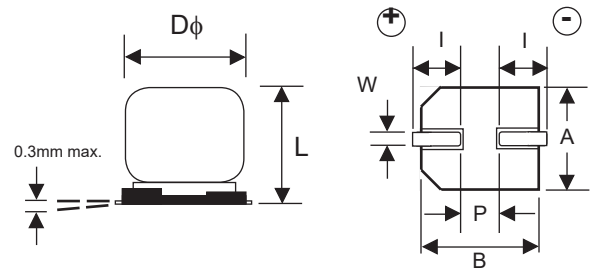
# Surface Mount Aluminum Electrolytic Capacitors NACC Series

NIC Part Number	Cap. (μF)	W.V. (Vdc)	Dissipation Factor (Tan δ)	Max. Ripple Current (mA) +105°C/120Hz	Maximum ESR (Ω) +20°C/120Hz	Load Life Hours @ +105°C
NACC220M6.3V4X6.1TR_F	22	6.3	0.30	26	22.6	3,000
NACC470M6.3V5X6.1TR_F	47		0.30	46	10.6	3,000
NACC101M6.3V6.3X6.1TR_F	100		0.30	71	4.98	3,000
NACC221M6.3V6.3X8TR_F	220		0.30	101	2.26	3,000
NACC331M6.3V8X10.5TR_F	330		0.30	230	1.51	5,000
NACC102M6.3V10X10.5TR_F	1000		0.50	313	0.83	5,000
NACC330M10V5X6.1TR_F	33	10	0.26	43	13.1	3,000
NACC221M10V8X10.5TR_F	220		0.26	160	1.96	5,000
NACC100M16V4X6.1TR_F	10	16	0.20	28	33.2	3,000
NACC220M16V5X6.1TR_F	22		0.20	39	15.1	3,000
NACC470M16V6.3X6.1TR_F	47		0.20	70	7.06	3,000
NACC101M16V6.3X8TR_F	100		0.20	81	3.32	3,000
NACC471M16V10X10.5TR_F	470		0.20	340	7.06	5,000
NACC330M25V6.3X6.1TR_F	33	25	0.16	65	8.04	3,000
NACC470M25V6.3X8TR_F	47		0.16	65	5.65	3,000
NACC101M25V8X10.5TR_F	100		0.16	130	2.66	5,000
NACC331M25V10X10.5TR_F	330		0.16	238	8.04	5,000
NACC4R7M35V4X6.1TR_F	4.7	35	0.14	15	49.4	3,000
NACC100M35V5X6.1TR_F	10		0.14	28	23.2	3,000
NACC220M35V6.3X6.1TR_F	22		0.14	55	10.6	3,000
NACC330M35V6.3X8TR_F	33		0.14	57	7.04	3,000
NACC221M35V10X10.5TR_F	220		0.14	220	1.06	5,000
NACC1R0M50V4X6.1TR_F	1.0	50	0.12	10	199	3,000
NACC2R2M50V4X6.1TR_F	2.2		0.12	16	90.4	3,000
NACC3R3M50V4X6.1TR_F	3.3		0.12	16	60.3	3,000
NACC4R7M50V5X6.1TR_F	4.7		0.12	23	42.3	3,000
NACC100M50V6.3X6.1TR_F	10		0.12	35	19.9	3,000
NACC220M50V6.3X8TR_F	22		0.12	49	9.04	3,000
NACC330M50V8X10.5TR_F	33		0.12	91	6.03	5,000
NACC470M50V8X10.5TR_F	47		0.12	100	4.24	5,000
NACC101M50V10X10.5TR_F	100		0.12	160	1.99	5,000

Part Number Suffix Where \_\_: Preferred (15" reel) = 15, Legacy (13" reel) = 13 (check with NIC for availability)

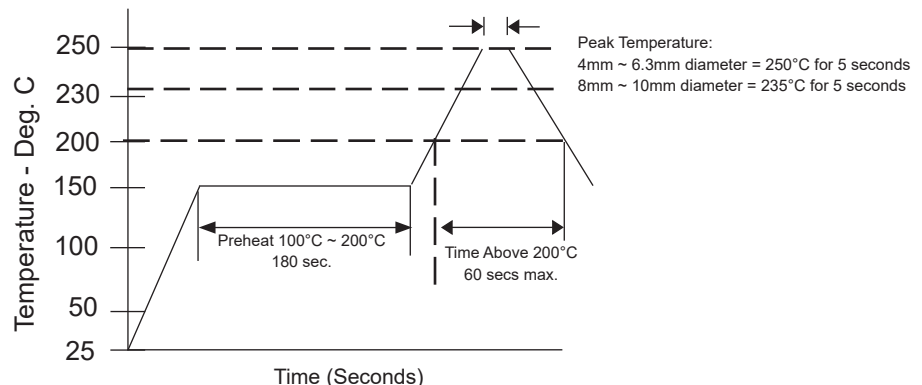
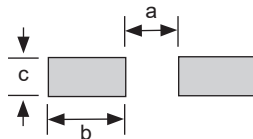
## DIMENSIONS D x L (mm)

Case Size	φD	L max.	A ± 0.2	B ± 0.2	I ± 0.2	W	P ± 0.2
4x6.1	4.0	6.1	4.3	4.3	1.8	0.5 ~ 0.8	1.0
5x6.1	5.0	6.1	5.3	5.3	2.2	0.5 ~ 0.8	1.5
6.3x6.1	6.3	6.1	6.6	6.6	2.6	0.5 ~ 0.8	1.8
6.3x8	6.3	8.0	6.6	6.6	2.6	0.5 ~ 0.8	1.8
8x10.5	8.0	10.5	8.3	8.3	3.4	0.7 ~ 1.1	3.1
10x10.5	10	10.5	10.3	10.3	3.5	0.7 ~ 1.4	4.6



## RECOMMENDED LAND PATTERN DIMENSIONS (mm)

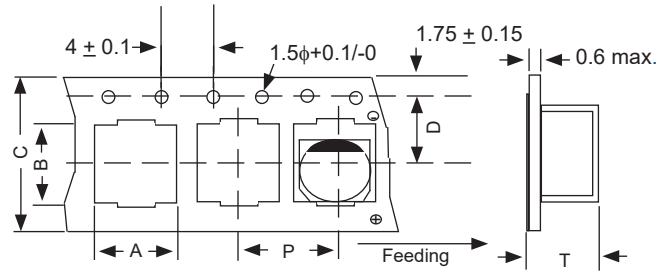
Case Size	a	b	c
4x6.1	1.0	2.5	1.6
5x6.1	1.5	2.8	1.6
6.3x6.1	1.8	3.2	1.6
6.3x8		3.2	1.6
8x10.5	3.1	4.0	2.0
10x10.5	4.6	4.1	2.0



# Surface Mount Aluminum Electrolytic Capacitors NACC Series

## CARRIER TAPE

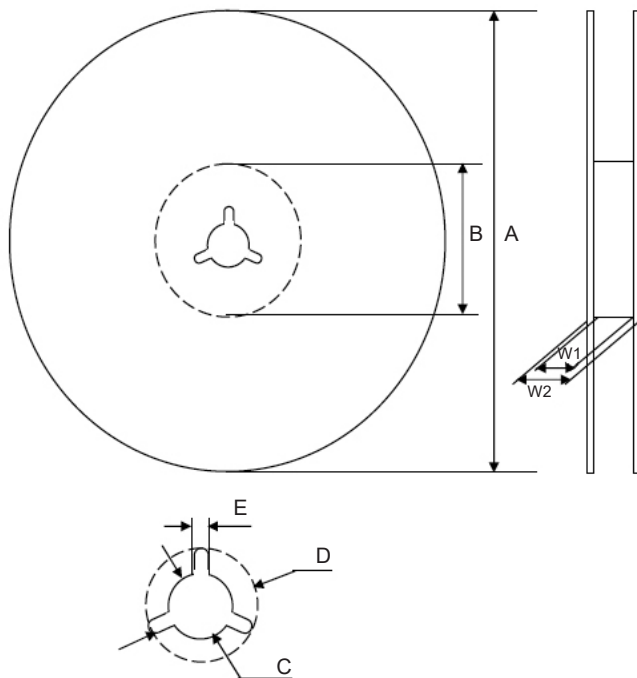
Case Size	A ±0.2	B ±0.2	C ±0.3	D ±0.1	P ±0.1	T ±0.2
4x6.1	4.7	4.7	12.0	5.5	8.0	6.2
5x6.1	5.7	5.7	12.0	5.5	12.0	6.4
6.3x6.1	7.0	7.0	16.0	7.5	12.0	6.4
6.3x8	7.0	7.0	16.0	7.5	12.0	8.4
8x10.5	8.7	8.7	24.0	11.5	16.0	11.0
10x10.5	10.7	10.7	24.0	11.5	16.0	11.0



## TAPING SPECIFICATIONS (mm)

- Both Leader and Trailer tape: Minimum 40mm (1.57") empty carrier tape pockets.
- Leader tape: Approximately 20cm of cover tape at leader.
- Connection: Maximum 3 connections (slices) per reel.

## Standard V-Chip 15" (380mm) Reels (TR15F suffix)



## Dimensions (mm)

Case Size	Tape Width	W1	W2
4x6.1, 5x6.1	12.0	12.4 ~ 14.4	15.5 ~ 20.0
6.3x6.1, 6.3x8	16.0	16.4 ~ 18.4	19.5 ~ 24.0
8x10.5, 10x10.5	24.0	24.4 ~ 26.4	27.5 ~ 32.0

Case Size	Tape Width	A	B	C	D	E
4x6.1, 5x6.1	12.0	φ330 ±2.0	φ50~105	φ13 ±0.5	φ21 ±1.0	2.0 ±0.5
6.3x6.1, 6.3x8	16.0					
8x10.5, 10x10.5	24.0					

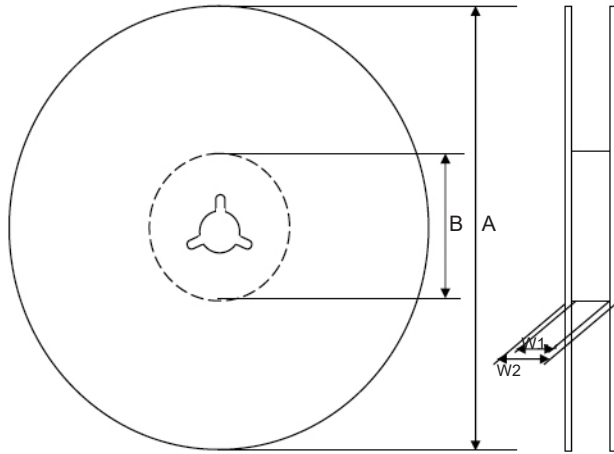
Color
Black or Blue

Case Size	Quantity Per Reel
	15" (380mm) Reel
4x6.1	2,000 pcs
5x6.1	2,000 pcs
6.3x6.1	1,000 pcs
6.3x8	900 pcs
8x10.5	500 pcs
10x10.5	500 pcs

# Surface Mount Aluminum Electrolytic Capacitors NACC Series

Optional V-Chip 330mm Reels (TR13F suffix)

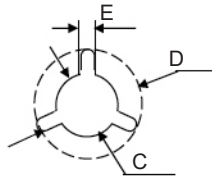
## Dimensions (mm)



Case Size	Tape Width	W1	W2
4x5.5, 4x6.3, 5x5.5	12.0	12.4 ~ 14.4	15.5 ~ 20.0
6.3x5.5, 6.3x6.3, 6.3x8, 8x6.5	16.0	16.4 ~ 18.4	19.5 ~ 24.0
8x10.5, 10x8, 10x10.5	24.0	24.4 ~ 26.4	27.5 ~ 32.0

Case Size	Tape Width	A	B	C	D	E
4x5.5, 4x6.3, 5x5.5	12.0	$\phi 330$ $\pm 2$	$\phi 50 \sim 105$	$\phi 13$ $\pm 0.5$	$\phi 21$ $\pm 1.0$	2.0 $\pm 0.5$
6.3x5.5, 6.3x6.3, 6.3x8, 8x6.5	16.0					
8x10.5, 10x8, 10x10.5	24.0					

Color
Black or Blue



Case Size	Quantity Per Reel
	13" (330mm) Reel
4x6.1	1,200 pcs
5x6.1	800 pcs
6.3x6.1	800 pcs
6.3x8	500 pcs
8x10.5	300 pcs
10x10.5	300 pcs