

Issue Date: November 30th, 2023

ID #NOV3023.356

Subject: NSPRT End of Life Notification

Notification Type: End of Life

Effected NIC Products: NSPRT Series

Effective Date: November 30th, 2023

Last Order Date: May 30th, 2024 for established customers with existing business

Last Ship Date: August 30th, 2024 for established customers with existing business

Description: Due to no market demand NIC has discontinued production of the NSPRT series. For a complete list of part numbers in Excel: [Click here](#)

Discontinued Part Number	Capacitance	Voltage	Case Size
NSPRT121M16V6.3X7.2YF	120	16	6.3X7.2
NSPRT271M16V8X9.5YF	270	16	8X9.5
NSPRT471M16V10X9.5YF	470	16	10X9.5
NSPRT561M16V10X11.5YF	560	16	10X11.5
NSPRT680M25V6.3X7.2YF	68	25	6.3X7.2
NSPRT151M25V8X9.5YF	150	25	8X9.5
NSPRT271M25V10X9.5YF	270	25	10X9.5
NSPRT331M25V10X11.5YF	330	25	10X11.5
NSPRT470M35V6.3X7.2YF	47	35	6.3X7.2
NSPRT101M35V8X9.5YF	100	35	8X9.5
NSPRT151M35V10X9.5YF	150	35	10X9.5
NSPRT221M35V10X11.5YF	220	35	10X11.5
NSPRT270M40V6.3X7.2YF	27	40	6.3X7.2
NSPRT560M40V8X9.5YF	56	40	8X9.5
NSPRT101M40V10X9.5YF	100	40	10X9.5
NSPRT121M40V10X11.5YF	120	40	10X11.5
NSPRT150M50V6.3X7.2YF	15	50	6.3X7.2
NSPRT330M50V8X9.5YF	33	50	8X9.5
NSPRT560M50V10X9.5YF	56	50	10X9.5
NSPRT820M50V10X11.5YF	82	50	10X11.5
NSPRT100M63V6.3X7.2YF	10	63	6.3X7.2
NSPRT220M63V8X9.5YF	22	63	8X9.5
NSPRT330M63V10X9.5YF	33	63	10X9.5
NSPRT330M63V8X9.5YF	33	63	8X9.5
NSPRT470M63V10X9.5YF	47	63	10X9.5
NSPRT560M63V10X11.5YF	56	63	10X11.5
NSPRT120M80V10X9.5YF	12	80	10X9.5
NSPRT150M80V10X9.5YF	15	80	10X9.5
NSPRT180M80V10X11.5YF	18	80	10X11.5

Discontinued Part Number	Capacitance	Voltage	Case Size
NSPRT100M100V10X9.5YF	10	100	10X9.5
NSPRT120M100V10X9.5YF	12	100	10X9.5
NSPRT150M100V10X11.5YF	15	100	10X11.5

Prepared by NIC Components TPMG, tpmg@niccomp.com

Hybrid Aluminum Electrolytic Capacitors

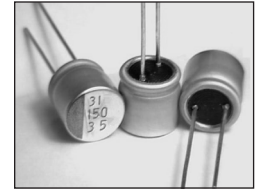
NSPRT Series

HIGH TEMPERATURE, EXTENDED LOAD LIFE, RADIAL LEADS, POLARIZED

FEATURES

- LONG ENDURANCE AT HIGH TEMPERATURE (up to 3,000HRS @ 125°C)
- REDUCED SIZES
- MEETS THE REQUIREMENTS OF AEC-Q200*
- *Contact NIC for supporting test data

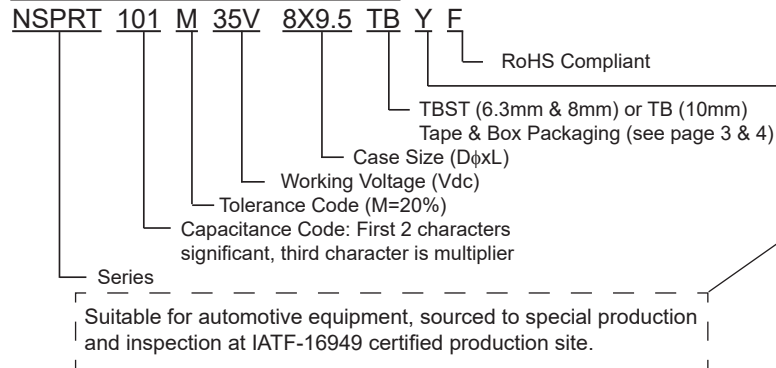
*** NEW ***
High Temperature
+125°C



CHARACTERISTICS

Rated Voltage Range		16 ~ 100VDC							
Capacitance Range		10 ~ 560 μ F							
Operating Temperature Range		-55°C ~ +125°C							
Capacitance Tolerance		\pm 20% (M)							
Maximum Leakage Current After 2 minutes		0.05CV or 100 μ A whichever is greater							
Max. Tan δ at 120Hz/20°C	W.V. (Vdc)	16	25	35	40	50	63	80	100
	S.V. (Vdc)	20	32	44	50	63	79	100	125
Tan δ		0.16							
Low Temperature Stability Impedance Ratio @ 120Hz	Z-55°C/Z+20°C	1.0 ~ 2.5							
	Z+125°C/Z+20°C	0.6 ~ 1.0							
Load Life Test @ 125°C	Voltage	16V				25V ~ 100V			
	Duration	ϕ D 6.3mm = 1,500 hours ϕ D \geq 8mm = 2,500 hours				ϕ D 6.3mm = 2,000 hours ϕ D \geq 8mm = 3,000 hours			
	Δ Capacitance	Within \pm 30% of initial measured value							
	Δ Tan δ	Less than 200% of specified value							
	Δ LC	Less than specified value							
Δ ESR	Less than 200% of specified value								

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



NIC COMPONENTS CORP.

www.niccomp.com

SPECIFICATIONS ARE SUBJECT TO CHANGE

STANDARD PRODUCT AND CASE SIZE TABLE DφxL (mm)

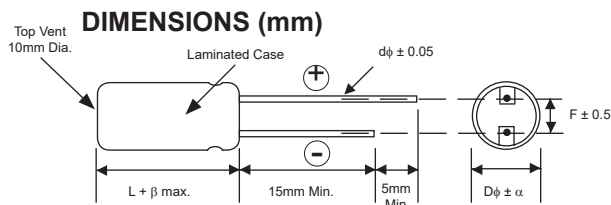
Part Number	Cap. (μF)	W.V. (Vdc)	Dissipation Factor +20°C/120Hz	Leakage Current (μA) after 2 minutes	Ripple Current Rating (mA) +125°C/100KHz	Max. ESR (mΩ) +20°C/100KHz	Load Life Hours @+125°C
NSPRT121M16V6.3X7.2YF	120	16	0.16	100.0	1160	40	1,500
NSPRT271M16V8X9.5YF	270		0.16	216.0	1540	26	2,500
NSPRT471M16V10X9.5YF	470		0.16	376.0	2010	21	2,500
NSPRT561M16V10X11.5YF	560		0.16	448.0	2320	15	2,500
NSPRT680M25V6.3X7.2YF	68	25	0.16	100.0	980	45	2,000
NSPRT151M25V8X9.5YF	150		0.16	187.5	1330	27	3,000
NSPRT271M25V10X9.5YF	270		0.16	337.5	1520	22	3,000
NSPRT331M25V10X11.5YF	330		0.16	412.5	1740	16	3,000
NSPRT470M35V6.3X7.2YF	47	35	0.16	100.0	910	60	2,000
NSPRT101M35V8X9.5YF	100		0.16	175.0	1260	30	3,000
NSPRT151M35V10X9.5YF	150		0.16	262.5	1480	23	3,000
NSPRT221M35V10X11.5YF	220		0.16	385.0	1700	17	3,000
NSPRT270M40V6.3X7.2YF	27	40	0.16	100.0	870	70	2,000
NSPRT560M40V8X9.5YF	56		0.16	112.0	1220	32	3,000
NSPRT101M40V10X9.5YF	100		0.16	200.0	1440	24	3,000
NSPRT121M40V10X11.5YF	120		0.16	240.0	1650	18	3,000
NSPRT150M50V6.3X7.2YF	15	50	0.16	100.0	840	80	2,000
NSPRT330M50V8X9.5YF	33		0.16	100.0	1170	35	3,000
NSPRT560M50V10X9.5YF	56		0.16	140.0	1390	25	3,000
NSPRT820M50V10X11.5YF	82		0.16	205.0	1590	19	3,000
NSPRT100M63V6.3X7.2YF	10	63	0.16	100.0	740	100	2,000
NSPRT220M63V8X9.5YF	22		0.16	100.0	1090	40	3,000
NSPRT330M63V8X9.5YF	33		0.16	104.0	1090	40	3,000
NSPRT330M63V10X9.5YF	33		0.16	104.0	1260	30	3,000
NSPRT470M63V10X9.5YF	47	80	0.16	148.1	1260	30	3,000
NSPRT560M63V10X11.5YF	56		0.16	176.4	1440	22	3,000
NSPRT120M80V10X9.5YF	12		0.16	100.0	900	70	3,000
NSPRT150M80V10X9.5YF	15		0.16	100.0	900	70	3,000
NSPRT180M80V10X11.5YF	18	100	0.16	100.0	1100	50	3,000
NSPRT100M100V10X9.5YF	10		0.16	100.0	870	80	3,000
NSPRT120M100V10X9.5YF	12		0.16	100.0	870	80	3,000
NSPRT150M100V10X11.5YF	15		0.16	100.0	1000	60	3,000

RIPPLE CURRENT FREQUENCY CORRECTION FACTORS

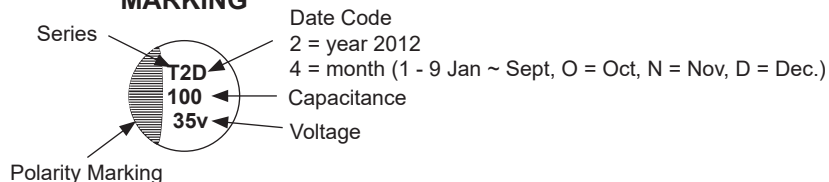
Frequency (Hz)	100	1K	10K	≥100K
10μF ~ 33μF	0.05	0.32	0.67	1.00
47μF ~ 560μF	0.10	0.35	0.70	1.00

LEAD SPACING AND DIAMETER (mm)

Case Dia. (Dφ)	6.3	8	10
Lead Dia. (dφ)	0.45	0.6	0.7
Lead Spacing (F)	0.25	3.5	5.0
Dim. α	0.5		
Dim. B	1.5		



MARKING

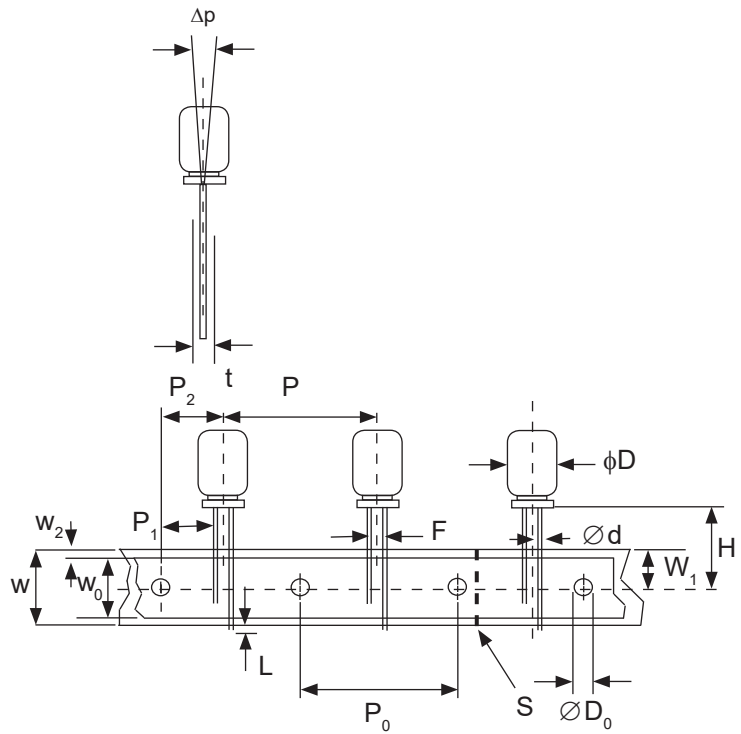


RADIAL TAPING SPECIFICATIONS FOR 6.3mm and 8.0mm DIAMETER NSRPH PARTS PART NUMBER SUFFIX "TBST"

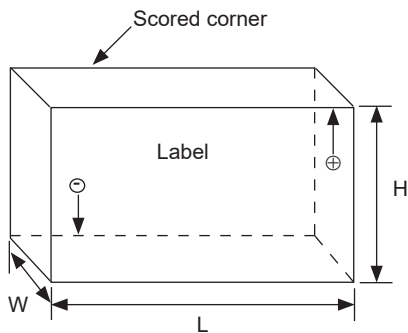
TAPING DIMENSIONS (mm)

Case Size	6.3x7.2	8x9.5
$d\phi \pm 0.05$	0.45	0.60
$H \pm 0.75$	17.5	20.0
$F + 0.8/-0.2$	2.5	3.5
$P \pm 1.0$	12.7	12.7
$P_0 \pm 0.2$	12.7	12.7
$P_1 \pm 0.5$	5.1	4.6
$P_2 \pm 1.0$	6.35	6.35
$W \pm 0.5$	18.0	18.0
W_0 min.	11.5	11.5
$W_1 \pm 0.5$	9.0	9.0
W_2	0 ~ 2.5	0 ~ 2.5
L max.	1.0	1.0
$D_0 \phi \pm 0.2$	4.0	4.0
Δp max.	1.0 (off alignment of body)	1.0 (off alignment of body)
$t \pm 0.2$	0.7 (not including lead)	0.7 (not including lead)

NOTE: Anode (+) lead feeds off first.



Ammo Box Dimensions (mm)



Ammo Box (Tape & Box) TBST

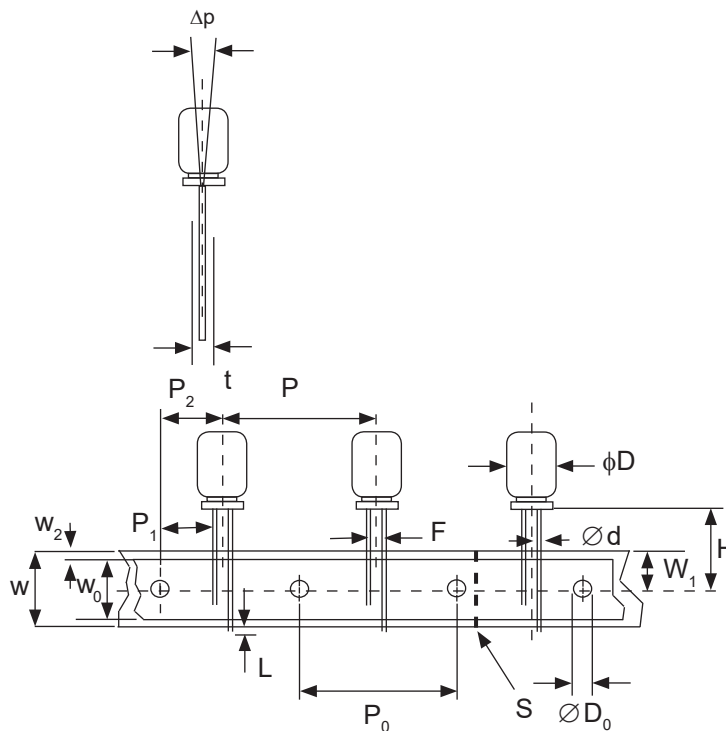
Size of box and component quantity

Case Size	Q'ty per Box (pcs)	Dim. L	Dim. H	Dim. W
$\phi 6.3 \times 7.2$	2,000	331	280	43
$\phi 8 \times 9.5$	1,000	331	240	51

RADIAL TAPING SPECIFICATIONS FOR 10X9.5mm DIAMETER NSRPH PARTS PART NUMBER SUFFIX "TB"

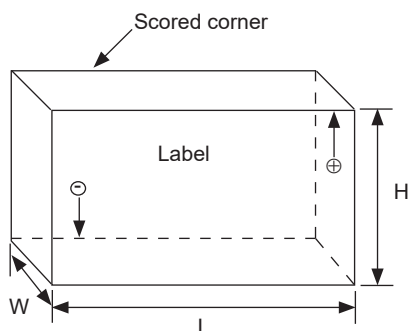
TAPING DIMENSIONS (mm)

Case Dia. (D ϕ)	10.0
d ϕ \pm 0.05	0.7
H \pm 1.5/-0.5	18.5
F \pm 0.5	5.0
P \pm 1.0	12.7
P ₀ \pm 0.2	12.7
P ₁ \pm 0.5	3.85
P ₂ \pm 1.0	6.35
W \pm 0.5	18.0
W ₀ min.	11.5
W ₁ \pm 0.5	9.0
W ₂	0 ~ 2.5
L max.	1.0
D ₀ ϕ \pm 0.2	4.0
Δp max.	1.0 (off alignment of body)
t \pm 0.2	0.7 (not including lead)



NOTE: Anode (+) lead feeds off first.

Ammo Box Dimensions (mm)



Ammo Box (Tape & Box) TB

Size of box and component quantity

Case Size	Q'ty per Box (pcs)	Dim. L	Dim. H	Dim. W
ϕ 10X9.5, 11.5	500	331	180	50