Date of application
Apr.15.2020

NICHICON CORPORATION
NICHICON (OHNO) CORPORATION
ENGINEERING DEPT.

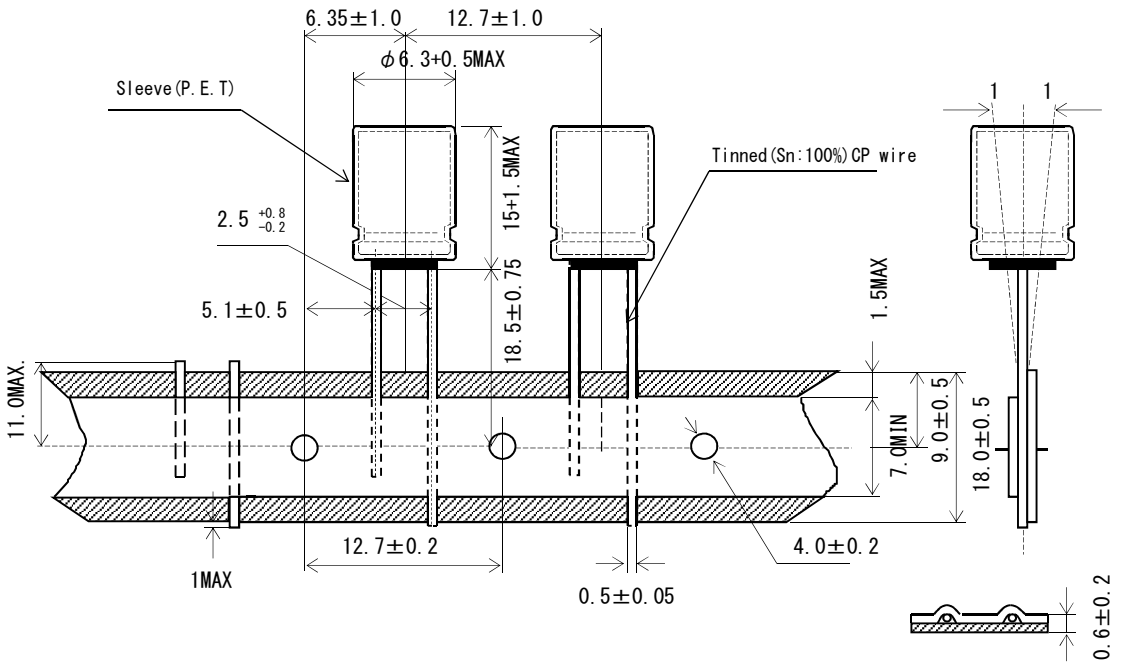
S P E C I F I C A T I O N

O F

ALUMINUM ELECTROLYTIC CAPACITORS

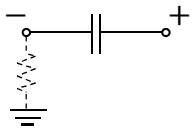
UVY1E271MEDANETD

DWG.No.	**H200415h1**	CHECKED	M.Murayama **Apr.15.2020**
DESIGNED.	K.Fukuda **Apr.15.2020**	APPROVED	M.Yoneda **Apr.15.2020**



<Example>

nichicon
270μF 25V
VY(M)
105℃
Lot. No.



CONNECTION DIAGRAM

Sleeve color:Black
Marking color:White

ELECTRICAL CHARACTERISTICS

WORKING VOLTAGE (V.D.C)	SURGE VOLTAGE (V.D.C)	RATED CAP (μF)	CAP.TOL. (%)	tanδ (MAX)	LEAKAGE CURRENT (μA MAX)	LEAKAGE CURRENT (μAMAX)	RIPPLE CURRENT (mArms MAX)
25	32	270	±20	0.16	202.5	67.5	200
		at 120Hz 20 ℃			25 V 20℃ after 1min	25 V 20℃ after 2min	at 120Hz 105℃

TEST STANDARD: JIS C 5101-4

OPERATING TEMP. RANGE: -55 ～ 105℃

NICHICON TYPE NO.

UVY1E271MEDANETD

RATE

25V 270μF

MARK	DATE	DESCRIPTIONS	APPR.
REVISION :			

3RD ANGLE PROJEC-TION	SCALE /mm	DATE	CASE SIZE
		2020/4/15	**φ6.3 × 15L**

SPECIFICATION		DWG. No.	H200415h1	sheet	2

SPECIFICATION ALUMINUM ELECTROLYTIC CAPACITOR

1. SCOPE
   This specification covers polarized aluminum foil drytype electrolytic capacitors.
   (JIS-04 TYPE)

2. APPLICABLE SPECIFICATION
   Japanese Industrial Standard JIS C 5101-4:1998 Characteristics W and
   JIS C-5101-1:1998 except as specified in this specification.

3. PERFORMANCE
   Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests is as follows:
   Ambient temperature: 5 to 35℃
   Relative humidity : 45 to 85%RH
   Air pressure : 86kPa to 106kPa
   If there may be any doubt on the results, measurements shall be made within the following limits,
   Ambient temperature : 20±2℃
   Relative humidity : 60 to 70%RH
   Air pressure : 86kPa to 106kPa

No.	Item	Test method	Performance
3.1	OPERATING TEMPERATURE RANGE		-55 ～ 105 ℃
3.2	RATED VOLTAGE		25 V
3.3	CAPACITANCE	at 120Hz±20%	270μF±20%
3.4	tanδ	at 120Hz±20% To comply with JIS C 5101-1 4.8	0.16 MAX.
3.5	LEAKAGECURRENT	TocomplywithJISC5101-14.9 After 1or2 minute'sapplication ofratedvoltage.(at20℃)	1 minute 202.5μA MAX. 2 minutes 67.5μA MAX.
3.6	SURGE VOLTAGE	To comply with JIS C 5101-1 4.26 The surge voltage specified in the individual standard shall be applied 1000 times, each for 30±5s, period of 6±0.5min. Electric discharge : Not to carry Out Test temperature : 15～35℃	Capacitance : Not less than 80 % of the value before test. tanδ : Not more than 200 % of the specified value. Leakage current : Initial specified value or less
3.7	IMPEDANCE RATIO AT LOW TEMPERATURE	To comply with JIS C 5101-1 4.10 -25,-40 $^{+0}_{-3}$ ℃ 2h Measurement frequency : 120Hz±20%	|Z|-25℃/|Z|20℃≦2 |Z|-40℃/|Z|20℃≦4
3.8	TERMINAL STRENGTH	To comply with JIS C 5101-1 4.13 Tensile strength of termination : tensile force holding time tensile force : 5 N Bending strength of termination : Count it as 2 times. Dead weight : 2.5 N	No abnormality such as cutting off, looseness or the like of termination.
3.9	SOLDERABILITY	To comply with JIS C 5101-1 4.15 Temperature of solder : 235±5℃ Dipping time : 2±0.5 s Storage time : after 6 month	At least 3/4 of circumferential surface of the dipped protion of termination shall be covered with new solder.
3.10	RESISTANCE OF SOLDERING	To comply with JIS C 5101-1 4.14 Temp. : 260±5℃ Time : 10±1s or Temp. : 350 ±10℃ Time : 3^{+1}_{-0} s	Capacitance change : Within ±10% of initial value tanδ : Initial specified value or less. Leakage current : Initial specified value or less. Appearance : No remarkable abnormality.

No.	Item	Test method	Performance
3.11	RESISTANCE TO DAMP HEAT(STEADY STATE)	To comply with JIS C 5101-1 4.22 Test temperature : 40±2℃ Relative humidity : 90～95%RH Test time : 240±8h	Capacitance change : Within ±15% of initial value tanδ : Initial specified value or less. Leakage current : Initial specified value or less. Appearance : No remarkable abnormality.
3.12	ENDURANCE	To comply with JIS C 5101-1 4.23 Test temperature : 105±2℃ Test time : 2000 $^{+72}_{0}$ h applied rated voltage.	Capacitance change : Within ±20 % of initial value tanδ : 200 % or less of initial specified value. Leakage current : Initial specified value or less. Appearance : No remarkable abnormality.
3.13	SHELF LIFE TEST	Test temperature : 105±2℃ Test time : 1000 $^{+48}_{0}$ h	Capacitance change : Within ±20 % of initial value tanδ : 200 % or less of initial specified value. Leakage current : Initial specified value or less. (Voltage treatment according to JIS C 5101-4 4.1) Appearance : No remarkable abnormality.
3.14	RESISTANCE TO VIBRATION	To comply with JIS C 5101-1 4.17 Direction and duration of vibration : 3 orthogonal directions mutually directions mutually each for 2h Total 6 h Frequency : 10 to 55 Hz Reciprocation for 1 min. Total amplitude : 1.5 mm	Capacitance : When the capacitance is measured, there shall be no intermittent contacts, or open or short-circuiting, and no abnormality. Appearance : No remarkable abnormality.
3.15	PRESSURE RELIEF VENT TEST	A.C Application Test The capacitor shall be subjected to an A.C. voltage (50 to 60Hz) with r.m.s value equal to 0.7 times the rated D.C. voltage through a series resistor. The series resistor as follows. R = 1 Ω D.C Application Test The capacitor shall be subjected to a reverse D.C. voltage equal to the rated D.C. voltage. the current flowing through the capacitor shall be limited to 1A.	There is no fire, when pressure relief vent operated. And also there is no explosion or fire etc at the testing for 30 minutes.
		NOTE : The test is terminated, if pressure relief vent does not operate for 30 minutes.	

4. MARKING

Capacitors shall be legibly marked with following.

4-1 Manufacture's Trade mark
4-2 Rated voltage
4-3 Nominal capacitance
4-4 EIA DATE CODE
4-5 Negative polarity
4-6 Capacitance Tolerance
4-7 Maximum operating temperture identification
4-8 Series identification

5. OTHERS

・The Relevant Export Regulation Laws:
In case that there is a certain danger of the products conflicting with the use and activity for the developments of weapons of mass destruction, the procedures based upon the relevant export regulation laws are adsolutely needed.

・Ozone Depletion Substance
Ozone depletion substances are not used in our production process and at our suppliers.

・Brominated Flame Retardants
The restricted brominated flame retardants are not used.

・Estimated life
Please use the estimated life, which is calculated at various temperature conditions etc, as reference value.

・Production factory
NICHICON (OHNO) CORPORATION
NICHICON (IWATE) CORPORATION
NICHICON (MALAYSIA) SDN.BHD.
NICHICON ELECTRONICS (WUXI) CO.,LTD.