ALUMINUM ELECTROLYTIC CAPACITORS
SPECIFICATION SHEET
RoHS Compliance : Halogen free

CUSTOMER PART No.		
RUBYCON PART No.	420 MXE 680 M GLE SN 30X45	
DRAWING No.	REE-049753	ISSUE No.1
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Rubycon Aluminum electrolytic capacitors Specification Sheet
420 MXE 680 M GLE SN 30X45

Drawing No. : REE-049753
Issue No. : 1

1. Scope

This specification shall apply to 420 MXE 680 M GLE SN 30X45, polarized aluminum electrolytic capacitors with non-solid electrolyte which we deliver to you for use in electronic equipments.

2. Reference Standard

JIS C 5101-1 Fixed capacitors for use in electronic equipment - Part 1 : Generic specification

JIS C 5101-4 Fixed capacitors for use in electronic equipment - Part 4 : Sectional specification: Aluminum electrolytic capacitors with solid (MnO_2) and non-solid electrolyte

3. Style and Numbering System

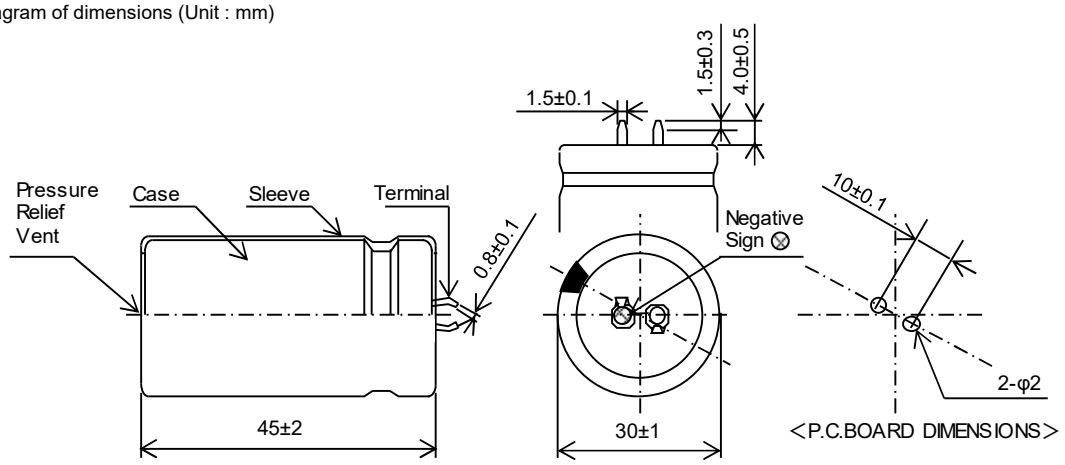
(1) Capacitor type CE

(2) Capacitor Style 69

(3) Numbering System

Rated Voltage	Series	Capacitance	Capacitance Tolerance	Option	Terminal Code	Case Size
420	MXE	680	M	GLE	SN	30X45

4. Diagram of dimensions (Unit : mm)



NAME	SLEEVE	CASE	SEAL	TERMINAL
MATERIAL	P.E.T.	Aluminum	Rubber-laminated bakelite	SPCC(Tin plating)

5. Electrical Performance

<Table-1>

Category Temperature Range		-25 ～+105	(℃)
Nominal Capacitance	20℃/120Hz	680	(μF)
Capacitance Tolerance	20℃/120Hz	-20 ~ +20	(%)
Rated Voltage		420	(V.DC)
Surge Voltage		470	(V.DC)
Leakage Current	20℃,5min	1603	(μA max.)
Dissipation Factor (tanδ)	20℃/120Hz	0.20	(max.)
Rated Ripple Current	105℃/120Hz	2.21	(Ar.m.s.)
Impedance Ratio 120Hz	Z(-25℃)/Z(20℃)	8	(max)

Z(20℃)：Impedance at 20℃ Z(-25℃)：Impedance at -25℃

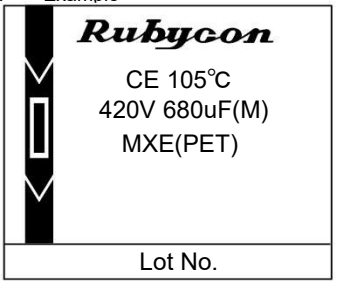
6. Marking

Unless otherwise specified, capacitor shall be clearly marked the following items on its body.

Sleeve color: Black, Lettering color: White

(1)Trade mark
(2)Mark Indicating Electrolytic Capacitor
(3)Upper Operating Temperature
(4)Rated Voltage
(5)Nominal Capacitance (Tolerance)
(6)Series (Sleeve material)
(7)Polarity
(8)Lot No.

<Example>



7. Frequency Coefficient of Rated Ripple current

Frequency(Hz)	60(50)	120(100)	300	500	1k	10k≤
Coefficient	0.80	1.00	1.15	1.20	1.25	1.40

8. Temperature Coefficient of Rated Ripple current

Ambient Temperature(℃)	105	85	65≥
Coefficient	1.00	1.88	2.26

9. Endurance

D.C.voltage and rated ripple current shall be applied to capacitors for a period of 2000 +72/0 hours at maximum operating temperature ±2℃.
The D.C.voltage and peak A.C.voltage combined must not exceed the rated voltage.
The capacitors under test shall be protected against direct heat radiation from the heat source.
After the test, the capacitor shall meet the following requirements.

Capacitance Change	: Within ±20% of the initial value
Dissipation Factor	: Not more than 200% of the specified value
Leakage Current	: Not more than the specified value

10. Notes (on the use of aluminum electrolytic capacitors)

(1)Charge and discharge

Do not use for a circuit where rapid charge and discharge is frequently repeated.

(2)Insulation

Aluminum electrolytic capacitors are covered with P.E.T. sleeve which purpose is mainly indication of necessary items. The case of capacitor and the cathode terminal are not insulated.

(3)Polarity

Please confirm the polarity before use because this capacitor has polarity.

* Guide to application except the above are described in our catalog and JEITA RCR-2367D (including any amendments).
JEITA RCR-2367D: "Safety application guide for fixed aluminum electrolytic capacitors for use in electronic equipment."
Published by Japan Electronics and Information Technology Industries Association.