

Electric double layer capacitors

SPECIFICATION SHEET

Customer Part No.		
Rubycon Part No.	2.7 DMG 1 M MYS 8X16	
Drawing No.	REE-0A0204	Issue No. 1
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RUBYCON CORPORATION

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1 . Scope

(1) This standard specifies polarity electric double layer capacitor used in electric and electronic equipment.

(2) Manufactory of DMC series

JapanRubyconHeadoffice1938-1,Nishi-MinowaIna-City,NaganoPref,3994593,JAPAN

2 . Conforming standards (Other maters not specified in this reference charts are conform to the folowing regulations.)

JIS C 5160-1...Fixed electric double-layer capacitors for use in electric and electronic equipment part-1: Generic specification

3 . Category Temperature Range

-40 C ~ +70 C

4 . Numbering System

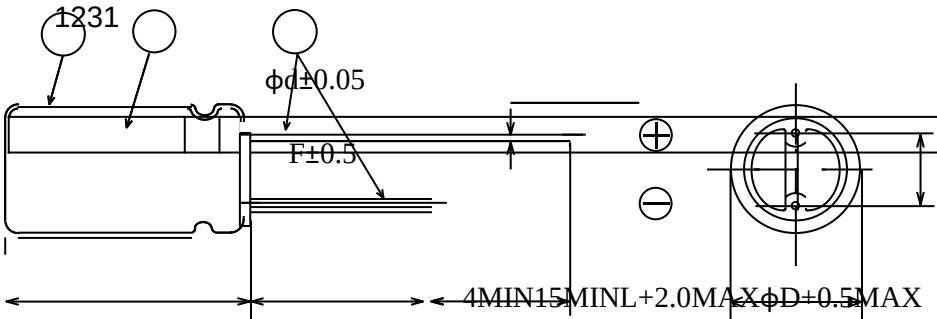
RatedSeriesNominalCapacitanceOptionCaseSize

VoltageCapacitanceTolerance

2.7DMC1MMY48X16 _ _ _ _

5 . Diagram of dimensions (unit : mm)

Long lead



D8① SleeveP.E.T.	
L16② CaseAluminum	
F3.5③ LeadWireCoppercladsteelwire(Tinplated)	
d0.6	

6 . Marking

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

Sleeve color : Dark Blue, Printed wordings : Gold

(1)TrademarkRubycon

(2)RatedVoltage2.75V

(3)NominalCapacitance1F

(4)Polarity(NegativePolarity)



(5)SeriesDMC

(6)LotNumber(1ormore)

LotNo.numberingsystem



LotNumber

Manufacturedcode

N.....RubyconHeadoffice

DMCSERIES

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7 . Electrical Performance

Table-1

RatedVoltage(V)Size	D×L(mm)	NominalCapacitanceCapacitance(F)Tolerance(%)	ACinternalresistance(ESR)(ΩMAX)at1kHz20°C
2.751 - 20 ~ +	208×160.5		

Table-2 PERFORMANCE

1	TemperatureCharacteristic<Condition>	<table> <tr> <th>StepTest</th> <th>temperature(C)</th> <th>Time</th> </tr> <tr> <td>120</td> <td>2</td> <td>Timetoreachthermalequilibrium</td> </tr> <tr> <td>2-40</td> <td>3/</td> <td></td> </tr> <tr> <td>370</td> <td>2/</td> <td></td> </tr> </table> <Criteria> <table> <tr> <td>Step1</td> <td>ElectrostaticcapacityValueforcomparisonisused.</td> </tr> <tr> <td>Step2</td> <td>CapacitancechangeWithin±30%ofthevalueofstep1</td> </tr> <tr> <td></td> <td>ACinternalresistance(ESR)Sixtimesorlessthestandardvalue.</td> </tr> <tr> <td>Step3</td> <td>CapacitancechangeWithin±30%ofthevalueofstep1</td> </tr> <tr> <td></td> <td>ACinternalresistance(ESR)Belowthetstandardvalue.</td> </tr> </table>	StepTest	temperature(C)	Time	120	2	Timetoreachthermalequilibrium	2-40	3/		370	2/		Step1	ElectrostaticcapacityValueforcomparisonisused.	Step2	CapacitancechangeWithin±30%ofthevalueofstep1		ACinternalresistance(ESR)Sixtimesorlessthestandardvalue.	Step3	CapacitancechangeWithin±30%ofthevalueofstep1		ACinternalresistance(ESR)Belowthetstandardvalue.
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2	Endurance<Condition>	Capacitorunderthetestshalbeappliedtheratedvoltagecontinuouslyat70±2 Cfor1000₄₈₀ hours.Afterthetestandreturnedinstandardconditonfor16hoursormore,andthecapacitorshal meetfolowingrequirements. <Criteria> <table> <tr> <td>Capacitancechange</td> <td>Within±30%oftheinitialvalue.</td> </tr> <tr> <td>ACinternalresistance(ESR)</td> <td>Threetimesorlessthestandardvalue.</td> </tr> <tr> <td>Appearance</td> <td>Thereisnodamageonapearance,andisnoleakageof electrobath.</td> </tr> </table>	Capacitancechange	Within±30%oftheinitialvalue.	ACinternalresistance(ESR)	Threetimesorlessthestandardvalue.	Appearance	Thereisnodamageonapearance,andisnoleakageof electrobath.																
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Appearance	Thereisnodamageonapearance,andisnoleakageof electrobath.																							
3	Storageathightemperature<Condition>	Capacitorsshallbestoredat70±2 Cwithnovoltageappliedfor1000₄₈₀ hours.Afterthetestand returnedinstandardconditionfor16hoursormore,andthecapacitorshalmeetfolowingrequirements. <Criteria> <table> <tr> <td>Capacitancechange</td> <td>Within±30%oftheinitialvalue.</td> </tr> <tr> <td>ACinternalresistance(ESR)</td> <td>Threetimesorlessthestandardvalue.</td> </tr> <tr> <td>Appearance</td> <td>Thereisnodamageonapearance,andisnoleakageof electrobath.</td> </tr> </table>	Capacitancechange	Within±30%oftheinitialvalue.	ACinternalresistance(ESR)	Threetimesorlessthestandardvalue.	Appearance	Thereisnodamageonapearance,andisnoleakageof electrobath.																
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8 . Caution for use (1) Polarity The electric double layer capacitor has polarity. Please use after confirming the polarity. (2) External stress Please do not apply external strong force on the main body, lead wire and the terminal. (3) Resistance to solder When soldering the electric double layer capacitor with the printed circuit board under very high temperature and for a long period of time, the second coated sleeve may shrunk so much and thus may caused the sleeve to crack. Moreover, please note that the heat generated when the adhesive stiffens and when the capacitor's coated sleeve come in contact with other parts of the capacitors, such as the lead wire or the patterns on the two sided circuit board might damage the sleeve. (4) Nonconductivity The sleeve of the electric double layer capacitor is for display purpose. And, the insulation of the sleeve is not guaranteed. When mounting onto the circuit board, the wiring patern must not hang on the capacitor's mounted part. (5) Storage The storage conditions of the electric double layer capacitor might influence its performance. (Storage conditions) *Please do not store the capacitors in high temperature and high level of humidity. (The suitable storage condition is 5 C~35 C and less than 75% in relative humidity). *Please do not store the capacitors in damp conditons such as water, salt water and oil, and also do not store the capacitors in an environment ful of gassy state oil and salt. *Please do not store the capacitors in an environment ful of hazardous gas (hydrogen sulfide, sulfurous acid, nitrous acid, chlorine, ammonia, bromine, and methyl bromide, etc.) It occurs when fumigated with the halogen-fumigated material. *Please do not store the capacitor in acidity and alkaline solvents environment. *Please do not store the capacitor under the exposure to ozone, ultraviolet rays, and radiation. *Please do not store the capacitor in an environment expose to external vibrations and impact. (6) Washing of circuit board after soldering Please consult before washing. (7) About disposal Please adopt the folowing actions when disposing the electric double layer capacitor. 1. Please incinerate when the capacitor is punctured or when it is crushed thoroughly. 2. Please consign it to a special industrial waste disposal company when not incinerating the capacitor. The above precaution for use applies to JEITA RCR-2370C (Safety Application Guide for electric double layer capacitors.) Please refer to the above-mentioned guideline for more details.				
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