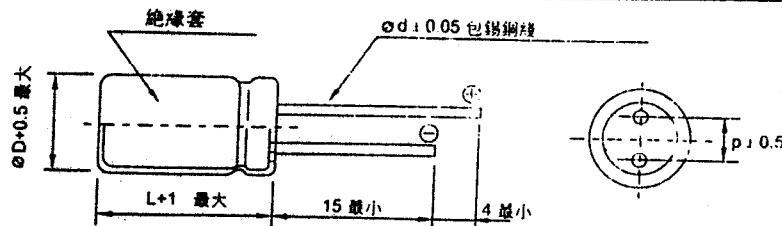


— 元 电 子 (集 团) 有 限 公 司
SAMCON ELECTRONICS (HOLDINGS) CO., LTD.

ELECTROLYTIC CAPACITOR ENGINEERING SPECIFICATION

NO.
DATE: 10/May/04

CUSTOMER						CUSTOMER APPROVAL		
YOUR PART NO.								
SAMCON PART NO.	EG10V221M							
DESCRIPTION	220	μ F	10	WV.	SIZE			ϕ 6.3 $\times$ 11
TOLERANCE	$\pm 20\%$ AT 120Hz 20°C							
TEMP. RANGE	— 40°C +105°C		SURGE VOLTAGE		11			V
PLEASE CHOP HERE. TKS!								



$\phi D = 6.3$	± 0.5 MAX
$L = 11$	± 1 MAX
$P = 2.5$	± 0.5
$\phi d = 0.5$	± 0.05

☐ PLEASE REFER ATTACHMENT FOR DRAWING

OPERATION TEMP. RANGE	- 40°C+105°C		
CAPACITANCE TOLERANCE	±20% AT 120Hz 20°C (M)		
DISSIPATION FACTOR (tan δ)	19 % MAX. AT 120Hz 20°C		
LEAKAGE CURRENT	22 μA MAX. (5MINUTES APPLYING WV.)		
ALLOWABLE RIPPLE CURRENT	150 mA MAX. AT 120Hz 105°C		
TERMINAL STRENGTH	PULL TEST	0.5 KG. 10 ± 1 SEC.	
	BEND TEST	0.25 KG. 90° 4 TIMES MINIMUM	
SOLDERING ABILITY	235°C±5°C		SOLDERING MUST COVER MORE THAN 75% OF THE AREA
	5 TO 10 SEC. ± 0.5 SEC.		
IMPEDANCE PATIO (MAX)	Z-25°C/Z+20°C	3	120Hz
LOW TEMPERATURE CHARACTERISTICS	Z-40°C/Z+20°C	6	
LIFE TEST 1. LOAD LIFE (after application of the rated voltage at 105°C) 2. SHELF LIFE (no voltage apply at 105°C hrs.)	Test Time	1000 hrs	500 hrs
	Test Item	Load Life	Shelf Life
	Leakage Current	Within the specified value	Not exceed 200% of specified value
	Dissipation Factor	Less than 200% of specified value	
	Capacitance Change	Within ± 20% of the initial value	
STANDARDS	SATISFIES CHARACTERISTIC W OF JIS C-5141		
香港九龍灣啟祥道26號同力工業中心A座1樓A2及A8室 UNIT A2 & A8, BLOCK A, 1/F, TONIC INDUSTRIAL CENTRE, 26 KAI CHEUNG ROAD, KOWLOON BAY, HONG KONG. TEL.: (852) 2799 1988 FAX: (852) 2362 1514 E-mail: samcon@netvigator.com	APPROVED BY	CHECKED BY	DESIGNED BY

Materials should not contain any substances which is specified in SS-00259

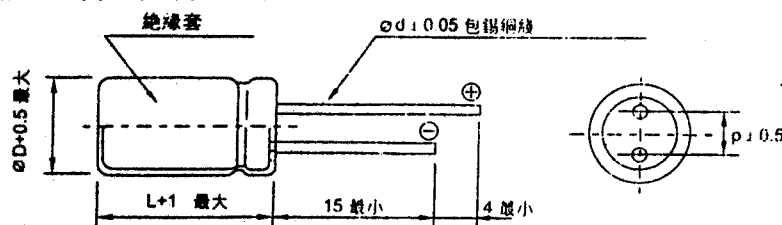
三光电子 (集团) 有限公司
SAMCON ELECTRONICS (HOLDINGS) CO., LTD.

NO.

DATE: 10/May/04

ELECTROLYTIC CAPACITOR ENGINEERING SPECIFICATION

CUSTOMER						CUSTOMER APPROVAL
YOUR PART NO.						
SAMCON PART NO.	EG10V101M					
DESCRIPTION	100	μ F	10	WV	SIZE ϕ 5 11	
TOLERANCE	$\pm 20\%$ AT 120Hz 20°C					
TEMP. RANGE	— 40°C+105°C		SURGE VOLTAGE		11 V	PLEASE CHOP HERE. TKS!



$\phi D = 5$	$\pm 0.5 \text{ MAX}$
$L = 11$	$\pm 1. \text{ MAX}$
$P = 2.0$	± 0.5
$\phi d = 0.5$	± 0.05

☐ PLEASE REFER ATTACHMENT FOR DRAWING

OPERATION TEMP. RANGE

— 40°C + 105°C

CAPACITANCE TOLERANCE

±20% AT 120Hz 20°C (M)

DISSIPATION FACTOR (tan δ)

19 % MAX. AT 120Hz 20°C

LEAKAGE CURRENT

10 μA MAX. (5 MINUTES APPLYING WV.)

ALLOWABLE RIPPLE CURRENT

87 mA MAX. AT 120Hz 105°C

TERMINAL STRENGTH

PULL TEST

0.5 KG. 10 ± 1 SEC.

BEND TEST

0.25 KG. 90° 4 TIMES MINIMUM

SOLDERING ABILITY

235°C ± 5°C

5 TO 10 SEC. ± 0.5 SEC.

SOLDERING MUST COVER MORE THAN 75% OF THE AREA

IMPEDANCE RATIO (MAX)

Z-25°C/Z+20°C

3

LOW TEMPERATURE CHARACTERISTICS

Z-40°C/Z+20°C

6

120Hz

LIFE TEST

1. LOAD LIFE

(after application of the rated voltage at 105°C)

2. SHELF LIFE

(no voltage apply at 105°C hrs.)

Test Time

1000 hrs

500 hrs

Test Item

Load Life

Shelf Life

Leakage Current

Within the specified value

Not exceed 200% of specified value

Dissipation Factor

Less than 200% of specified value

Capacitance Change

Within ± 20% of the initial value

STANDARDS

SATISFIES CHARACTERISTIC W OF JIS C-5141

香港九龙湾启祥道26号同力工业中心A座1楼A2及A8室
 UNIT A2 & A8, BLOCK A, 1/F, TONIC INDUSTRIAL CENTRE,
 26 KAI CHEUNG ROAD, KOWLOON BAY, HONG KONG.

TEL.: (852) 2799 1988

FAX: (852) 2362 1514

E-mail: samcon@netvigator.com

APPROVED BY

CHECKED BY

DESIGNED BY

Materials should not contain any substances which is specified in SS-90259

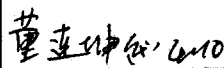
TEST DATA SHEET OF ELECTROLYTIC CAPACITORS

CUSTOMER: AML01 CUSTOMER'S PART NO. GQ40409B
 SERIES: GR Lot No : 20020807263
 RATINGS: 220 μ F 16 W.V. PART NO: EGR227MICE11RRS3
 QUANTITY TESTED: 10 PCS. QUANTITY SUBMITTED: 40 PCS.

Capacitance Tolerance 120Hz/25°C	DF(%) 120Hz/25°C	Leakage Current After 1 minutes	Impedance 100KHz/25°C
-20%~+20%	20 Max	35.2 μ A Max	/ Ω Max

Dimensions(m/m)			
Case Size		Lead Spacing	Lead Dia
Dia	Length		
$\phi 6.3 \pm 0.5$ Max	11 $\begin{smallmatrix} +1.5 \\ -1 \end{smallmatrix}$	2.5 ± 0.5	$\phi 0.5 \pm 0.05$

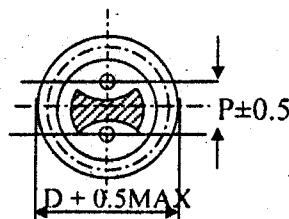
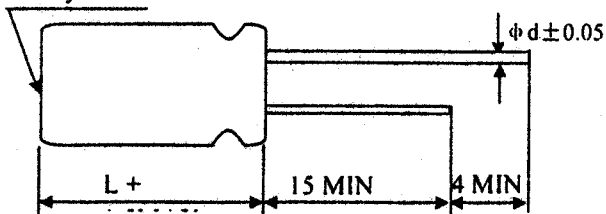
Serial No	Capacitance (μ F)	D.F.(%)	Leakage Current (μ A)	Impedance (Ω)	Remarks
1.	207.0	10.55	3.092		
2.	209.1	10.43	3.177		
3.	207.6	10.83	3.396		
4.	210.2	10.80	3.471		
5.	208.6	10.33	3.669		
6.	210.0	10.01	2.979		
7.	208.6	10.14	3.881		
8.	204.2	10.86	3.764		
9.	204.0	10.96	3.972		
10.	210.9	10.89	3.991		
X	208.0	10.55	3.539		
R	6.9	0.95	1.012		

	APPROVED BY	CHECKED BY	TESTED BY
			程静利
	TESTED METER		
	LCZ METER: 1061 LCZ LC METER: CLC-201		

SPECIFICATION			Issue Date : 08-Apr-04
			Revision Date:
ALUMINUM ELECTROLYTIC CAPACITOR			PART NO.:EGR227M1CE11RR
Based on Specification	Unless otherwise mentioned below,It shall be based on JIS-5141		Operating Temp. Range
Rated Capacitance	220	μ F at 120Hz +20°C	
Capacitance Tolerance	-20~+20	% at +20°C	
Rated Working Voltage	16	V.D.C	
Surge Voltage	20	V.D.C	
Tan δ	0.20	max. at 120Hz +20°C	
Leakage Current	35.2	μ A max. after 1 minutes	
Ripple Current	290	mA max.rms at 120Hz +85°C	
Endurance	The capacitor shall be subjected to application of the D.C.voltage with full rated ripple current in an ambient temperature of +85°C $\pm$ 2°C for a period of 1000 hours.After stability at +20°C, the capacitor shall not exceed the specified values listed below.(The sum of D.C voltage and ripple peak voltage shall not exceed the rated working voltage).		
	Capacitance Change	Within -20%~+20% of the initial measured value	
	Tan δ	Less than 200% of the initial specified value	
	D.C. Leakage Current	Less than initial specified value	
Shelf Life Test	The capacitor shall be held at +85°C $\pm$ 2°C for 1000 hours with no voltage applied.After stability at +20°C,the capacitor shall not exceed the specified values listed Endurance(With voltage treatment).		

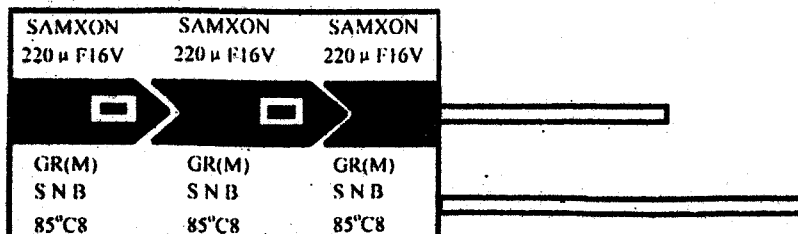
DIAGRAM OF DIMENSION (Unit:mm)

Safety vent for $\geq \phi 6.3$



ϕ D	6.3
P	2.5
L	11
ϕ d	0.5

MARKING SAMPLE:



Remark/Revision

MAN YUE ELECTRONICS Co., LTD.

16/F., Yiko Ind. Bldg, 10 Ka Yip Street, Chai Wan, HK.

Tel: 852-28975277 / Fax: 852-25586299

SAMXON