

SPECIFICATION: Bargraph display panel, MB202-3A

1. Application Scope This specification is applied to Mitani's plasma display panel, Model MB202-3A.

2. Structure and Outerview

2-1 Structure: The panel is made of two glass plates on which thick films are printed to construct gas discharge envelope and electrodes. Two glass plates are sealed in parallel by glass frit. Panel is designed for DC driven.

2 bars type, 201 segments (include 1 reset segment)

3 phase , self-scanning method

2-2 Dimension and Layout: Refer to Dwg#DM-0200

2-3 Appearance: No scratch, no flaw and no spot on the panel is allowed.

3. Visual Characteristics

3-1 Brightness: 30 ft-L

3-2 Color: Neon-orange

3-3 Viewing Angle: 120 degree

4. Electrical Parameters

4-1 Supply Voltage: DC 250 \pm 15V

4-2 Discharge Sustaining Voltage: DC 150V

4-3 Anode Current: DC 2.8 + 0.2 μ A
- 0.8 μ A

4-4 Seed Fire Current: 100 μ A

4-5 Refresh Cycle Rate: 70 Hz

5. Operating Condition

5-1 Reset Pulse Width: 70 + 230 μ Sec
- 0 μ Sec

5-2 Cathode Pulse Width: 70 + 230 μ Sec
- 10 μ Sec

5-3 Seed Fire Resistor: 1 M Ω \pm 10%

5-4 Anode Resistor: 36 K Ω + 5%

5-5 Anode Bias Voltage: DC 100V + 20V

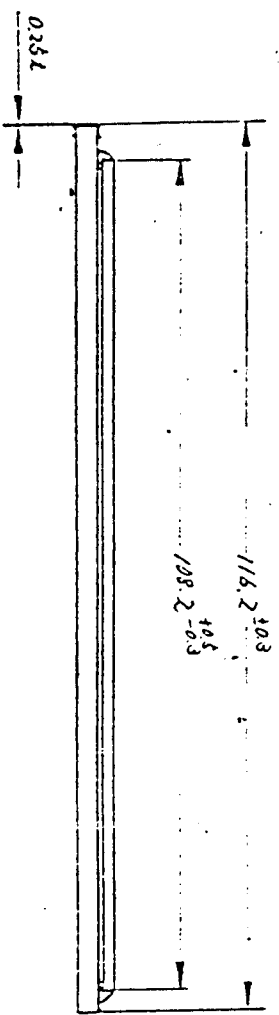
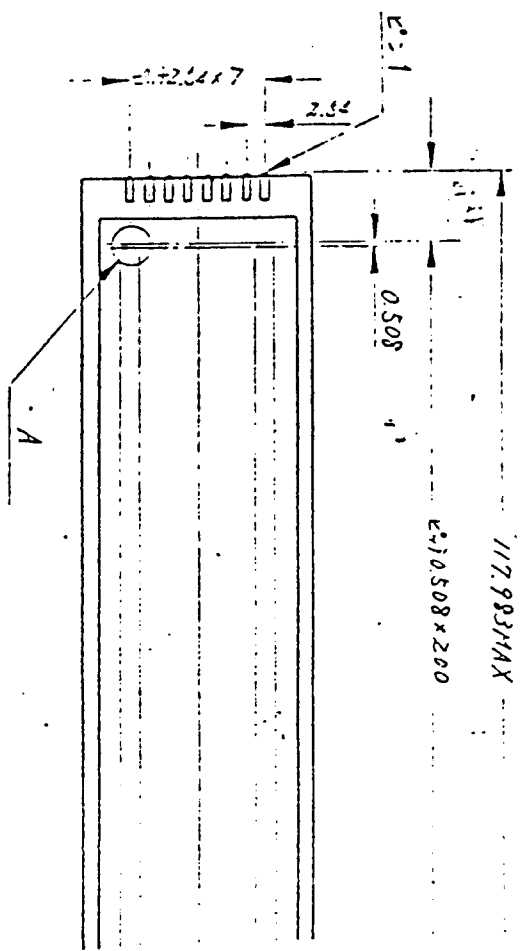
5-6 Cathode Bias Voltage: DC 72 + 4V

6. Environmental Conditions and Tests

- 6-1 Operating Temperature: 0 through +50° C
- 6-2 Storage Temperature: -40 through +70° C
- 6-3 Altitude: max. 70,000ft (appx. 21,336m) ^{C5023}
- 6-4 Humidity Test: Test should be made in accordance with JIS~~5023~~ and the result should be satisfied with 80% of specified requirement in Article 4.5. ^{C5025}
- 6-5 Vibration Test: Test should be made in accordance with JIS~~5025~~ and the result should be satisfied with 80% of specified requirement in Article 4.5.
- 6-6 Thermal Shock Test: Test should be made in accordance with JIS C5030 and the result should be satisfied with 80% of specified requirement in Article 4.5. ^{C5026}
- 6-7 Shock Test: Test should be made in accordance with JIS~~5026~~ and the result should be satisfied with 80% of specified requirement in Article 4.5.

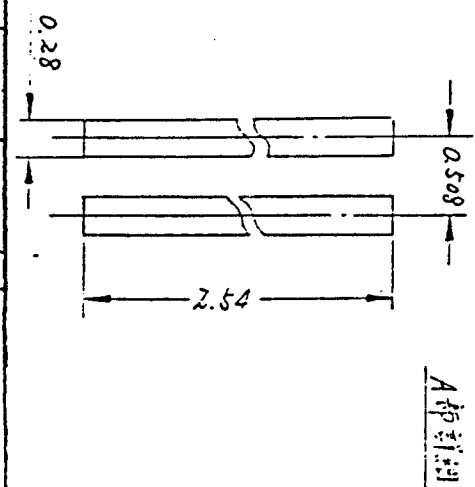
7. Standard Test Condition

Standard test condition is carried under temperature $20 \pm 2^{\circ}\text{C}$ and relative humidity $65 \pm 5\%$; however, it may be applicable that temperature 5 through 35°C with relative humidity 45 through 85% unless otherwise there is doubt about the result therefrom.



pin#	connection
1	left bar anode
2	1st phase
3	3rd phase
4	reset
5	seed fire anode
6	seed fire cathode
7	2nd phase
8	right bar anode

端子番号	接続
1	左バーアノード
2	1相
3	3相
4	リセット
5	種火アノード
6	種火カソード
7	2相
8	右バーアノード



改訂	—	製造	59.7.26	検査	59.7.26	承認	—	承認	—	承認	—
訂	—	製造	59.7.26	検査	59.7.26	承認	—	承認	—	承認	—
—	—	製造	—	検査	—	承認	—	承認	—	承認	—
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株式会社 九州ミタニ

MB202-3A

ネル寸法図

MB202-3A

SPECIFICATION: Bargraph Display Panel, MB202-5A

1. Application Scope This specification is applied to Mitani's plasma display panel, Model MB202-5A.

2. Structure and Outer View

2-1 Structure: The panel is made of two glass plates on which thick films are printed to construct gas discharge envelope and electrodes. Two glass plates are sealed in parallel by glass frit. Panel is designed for DC driven.

2 bars type, 201 segments (include 1 reset segment)
5 phase self-scanning

2-2 Dimension & Layout: Refer to Dwg#DM0202

2-3 Appearance: No scratch, no flaw and no spot on the panel is allowed.

3. Visual Characteristics

3-1 Brightness: 40 ft-L

3-2 Color: Neon-orange

3-3 Viewing Angle: 120° C

4. Electrical Parameters

4-1 Supply Voltage: DC 250V \pm 15V

4-2 Discharge Sustaining Voltage: DC 155V \pm 7.5V

4-3 Anode Current: 4 + 1mA
 - 0.5 mA

4-4 Seed Fire Current: 100 μ A

4-5 Refresh Cycle Rate: 70Hz

5. Operating Conditions

5-1 Reset Pulse Width: 140 + 40 μ S
 - 70 μ S

5-2 Cathode Pulse Width: 70 + 20 μ S
 - 10 μ S

5-3 Resistor, Seed Fire: 1 M Ω \pm 10%

5-4 Anode Resistor: 24K Ω \pm 5%

5-5 Anode Bias Voltage: DC 100V \pm 20V

5-6 Cathode Bias Voltage: DC 72 \pm 4V

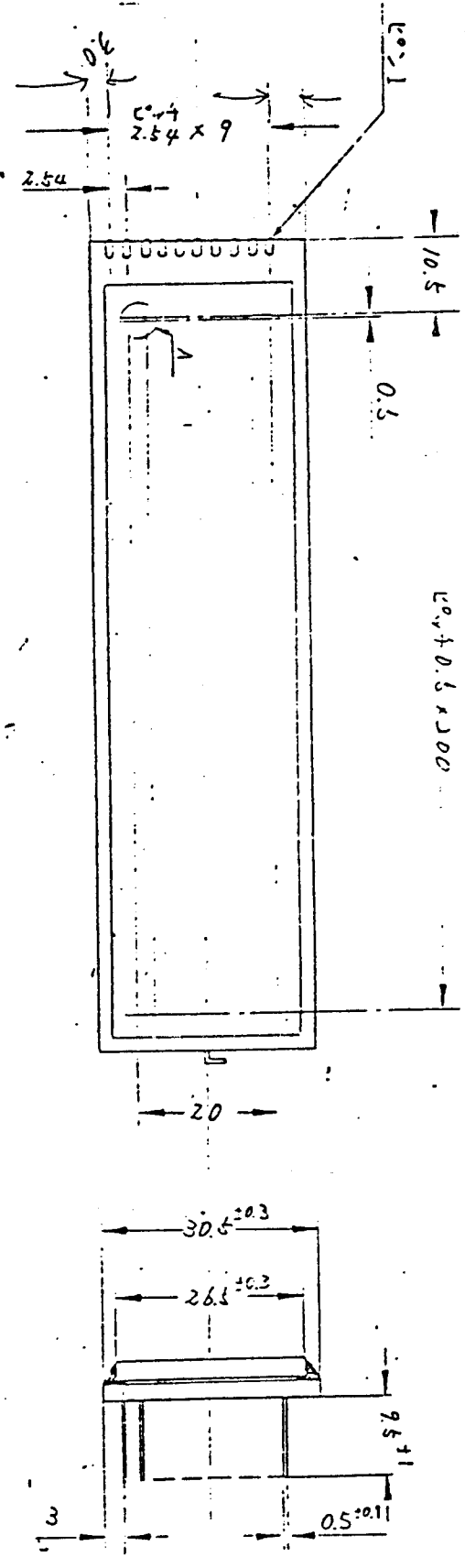


6. Environmental Conditions and Tests

- 6-1 Operating Temperature: 0 through 55°C
- 6-2 Storage Temperature: -40 through +85°C
- 6-3 Altitude: max. 70,000ft (21,336m) C5023
- 6-4 Humidity Test: Test should be made in accordance with JIS~~5023~~ and the result should be satisfied with 80% of specified requirement in Article 4.5. C5025
- 6-5 Vibration Test: Test should be made in accordance with JIS~~5025~~ and the result should be satisfied with 80% of specified requirement in Article 4.5.
- 6-6 Thermal Shock Test: Test should be made in accordance with JIS C5030 and the result should be satisfied with 80% of specified requirement in Article 4.5.
- 6-7 Shock Test: Test should be made in accordance with JIS~~5026~~ and the result should be satisfied with 80% of specified requirement in Article 4.5. C5026

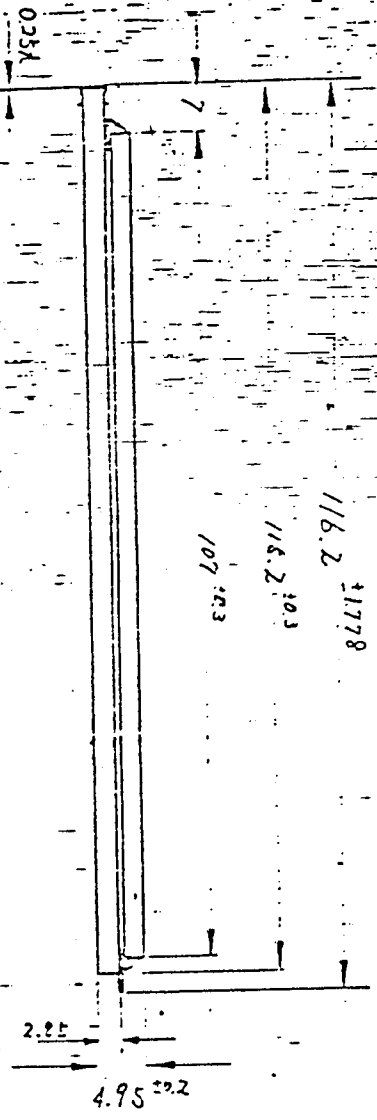
7. Standard Test Condition

Standard test condition is carried under temperature $20 \pm 2^{\circ}\text{C}$, and relative humidity $65 \pm 5\%$; however, it may be applicable that test under temperature 5 through 35°C with relative humidity 45 through 85% unless there is doubt about the result therefrom.



部配列

10	カ	カ	カ	カ	カ	カ	カ	カ	カ
9	カ	カ	カ	カ	カ	カ	カ	カ	カ
8	カ	カ	カ	カ	カ	カ	カ	カ	カ
7	カ	カ	カ	カ	カ	カ	カ	カ	カ
6	カ	カ	カ	カ	カ	カ	カ	カ	カ
5	カ	カ	カ	カ	カ	カ	カ	カ	カ
4	カ	カ	カ	カ	カ	カ	カ	カ	カ
3	カ	カ	カ	カ	カ	カ	カ	カ	カ
2	カ	カ	カ	カ	カ	カ	カ	カ	カ
1	カ	カ	カ	カ	カ	カ	カ	カ	カ
部配列	カ	カ	カ	カ	カ	カ	カ	カ	カ



部配列

品名	数量	単位	備考
部品名	12	個	
部品名	5311.8	個	
部品名	5311.8	個	
部品名	78202-5A	個	(C7011)
部品名	4-1306	個	
部品名	78202-5A	個	
会社名	株式会社 九州ミタニ		

単位: mm

SPECIFICATION FOR MODEL:MB202-5B(C 7008)

MITANI ELECTRONICS INDUSTRY CORPORATION

HI-TECH COMPONENTS AND PLASTICS CO.
A DIVISION OF
MITSUBISHI INTERNATIONAL CORPORATION
520 MADISON AVENUE, NEW YORK, N. Y. 10022

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

Model : MB202-5B(C 7008), Bargraph Display Panel

1. Application Scope

This specification is applied to Mitani's Plasma Display Panel Model: MB202-5B(C 7008).

2. Structure and Outer View

2-1 Structure: The panel is made of two glass plates on which thick films are printed to construct gas discharge envelope and electrodes. Two glass plates are sealed in parallel by glass frit. Panel is designed for DC driven.

* 2 bars type, 201 segments(include 1 reset segment) and 5 phase self-scanning.

2-2 Dimension and Layout: Refer to Dwg. # DM-0441

2-3 Appearance: No scratch, no flaw and no spot on the panel allowed.

3. Visual Characteristics

3-1 Brightness: 30 ft - L

3-2 Color: Neon-orange

3-3 Viewing Angle: 120°

4. Electrical Parameters

4-1 Supply Voltage: DC 250V + 15 V, - 15 V.

4-2. Discharge Sustaining Voltage: DC 150 V

4-3 Anode Current: Display - DC 6.5mA \pm 1 mA

Character - DC 11.5 mA \pm 2 mA

4-4 Seed Fire Current: 100 μ A

4-5 Refresh Cycle Rate: 65 Hz

5. Operating Conditions

5-1 Reset Pulse Width: 75 μ S + 75, - 5.

5-2 Cathode Pulse Width: 75 μ S + 75, - 5.

5-3 Resistor Seed Fire: 1 M Ω \pm 5 %

5-4 Anode Resistor: Display - 15K Ω \pm 5%

Character- 9K Ω \pm 5%

5-5 Anode Bias Voltage: DC 100V \pm 20V

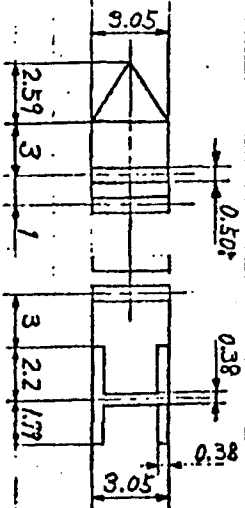
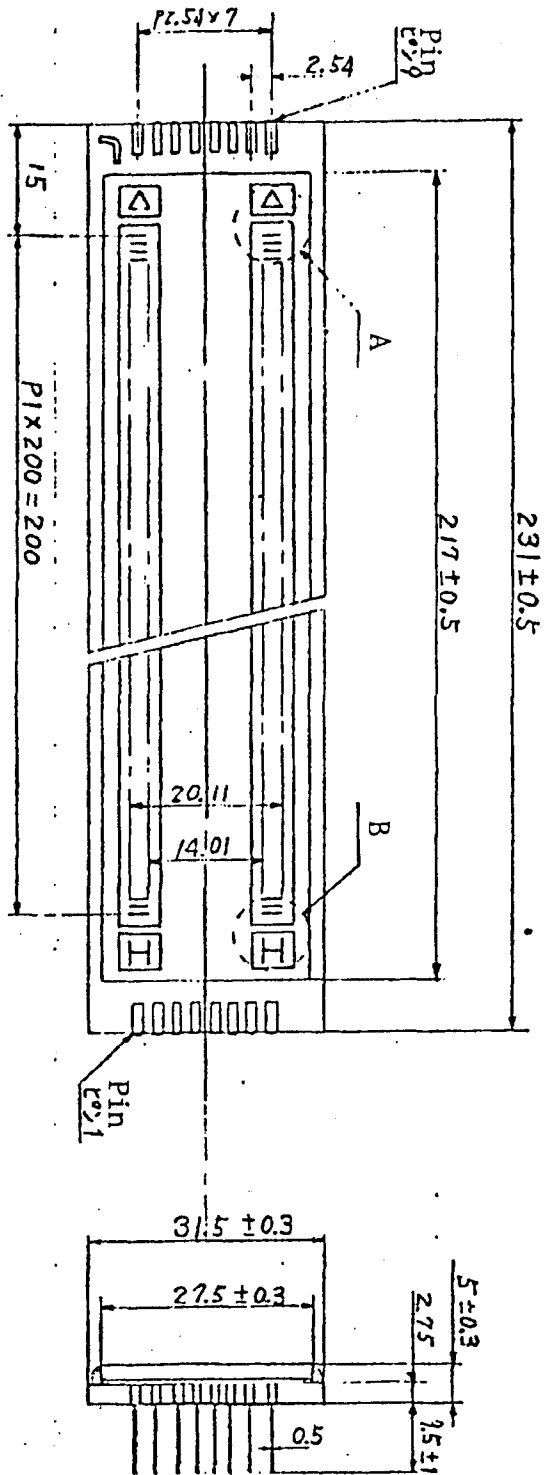
5-6 Cathode Bias Voltage: DC 72V \pm 4V

6. Environmental Conditions and Tests

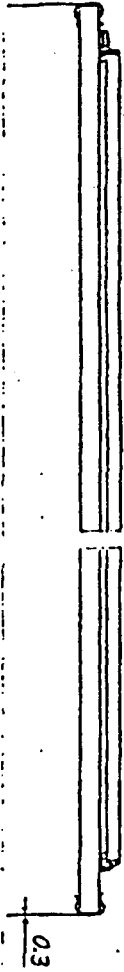
- 6-1 Operating Temperature: 0° through 55°C
- 6-2 Storage Temperature: -40°C through +85°C
- 6-3 Altitude: 70,000ft(21,336m)
- 6-4 Humidity Test: Test should be made in accordance with JIS C5023 and the result should be satisfied with 80% of specified requirement in Article 4, 5.
- 6-5 Vibration Test: Test should be made in accordance with C5025 and the result should be satisfied with 80% of specified requirement in Article 4, 5.
- 6-6 Thermal Shock Test: Test should be made in accordance with JIS C5030 and the result should be satisfied with 80% of specified requirement in Article 4, 5.
- 6-7 Shock Test: Test should be made in accordance with JIS C5026 and the result should be satisfied with 80% of specified requirement in Article 4, 5.

7. Standard Test Condition

Standard test condition is carried under temperature $20^{\circ} \pm 2^{\circ}\text{C}$ and relative humidity $65\% \pm 2\%$, however, it may be applicable that test under temperature 5°C through 35°C with relative humidity 45 through 85% unless otherwise there is doubt about the result therefrom.



Pin Layout
ピン配列



№	名称	規格	名称
1	φ4	9	▽ANODE TOP
2	-	10	φ1.8 "H"
3	φ5.8 "V"	11	BAR ANODE TOP
4	K/A ANODE RT	12	1/4 ANODE LT
5	K/A ANODE RT	13	1/4 CATHODE LT
6	φ3	14	BAR ANODE BOT
7	"H" ANODE TOP	15	RESET
8	φ2	16	▽ANODE BOT

改訂	-	写図	55/11/21	設計	55/11/22	検査	59/11/22	図番	DM-0441
訂	-	名	光吉	光吉	野	野	野	4-1336	
株式会社 九州ミタニ			ハニ寸法図			MB202-5B			