

Approved	Checked	Designed	DEVELOPMENT SPECIFICATION			
<i>K. Sarada</i>	<i>S. Takami</i>	<i>M. Miyajima</i>		P/N: LNV810105A	8	1

TYPE	10-ELEMENT BAR GRAPH ARRAY (Lighting color:Orange)																		
MATERIAL	GaAsP																		
APPLICATION	Indicators																		
OUTLINE	See attached drawing																		
CONNECTION	See attached drawing																		
ABSOLUTE MAXIMUM RATINGS	<table border="1"> <tr> <td>P/seg</td> <td>*1 I<sub>FP</sub>/seg</td> <td>I<sub>FDC</sub>/seg</td> <td>V<sub>R</sub></td> <td>Topr</td> <td>Tstg</td> </tr> <tr> <td>60</td> <td>100</td> <td>20</td> <td>3</td> <td>-25~+80</td> <td>-30~+85</td> </tr> <tr> <td>mW</td> <td>mA</td> <td>mA</td> <td>V</td> <td>°C</td> <td>°C</td> </tr> </table>	P/seg	*1 I <sub>FP</sub> /seg	I <sub>FDC</sub> /seg	V <sub>R</sub>	Topr	Tstg	60	100	20	3	-25~+80	-30~+85	mW	mA	mA	V	°C	°C
P/seg	*1 I <sub>FP</sub> /seg	I <sub>FDC</sub> /seg	V <sub>R</sub>	Topr	Tstg														
60	100	20	3	-25~+80	-30~+85														
mW	mA	mA	V	°C	°C														
CONDITION	Ta =25±3° C																		

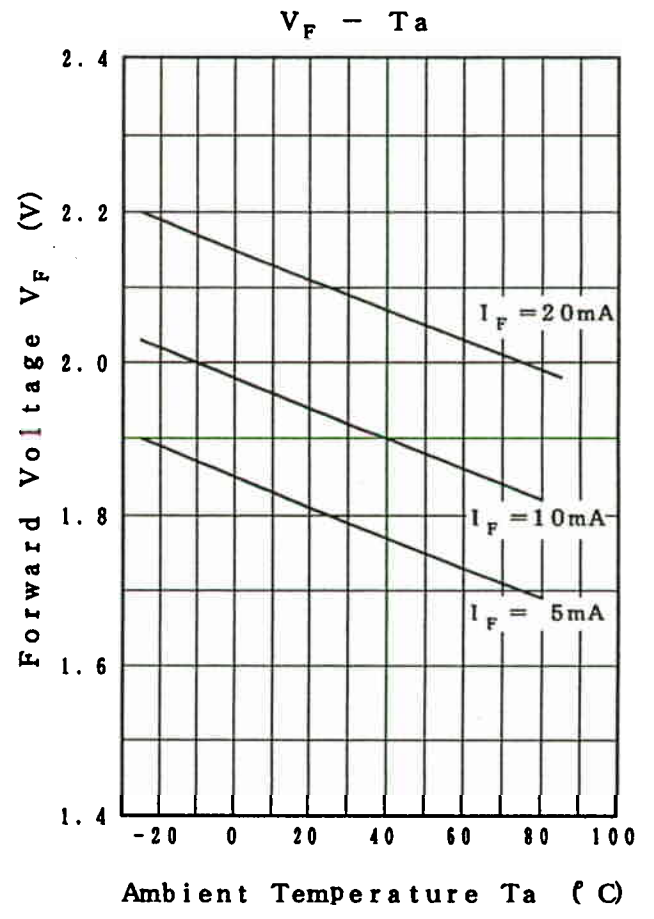
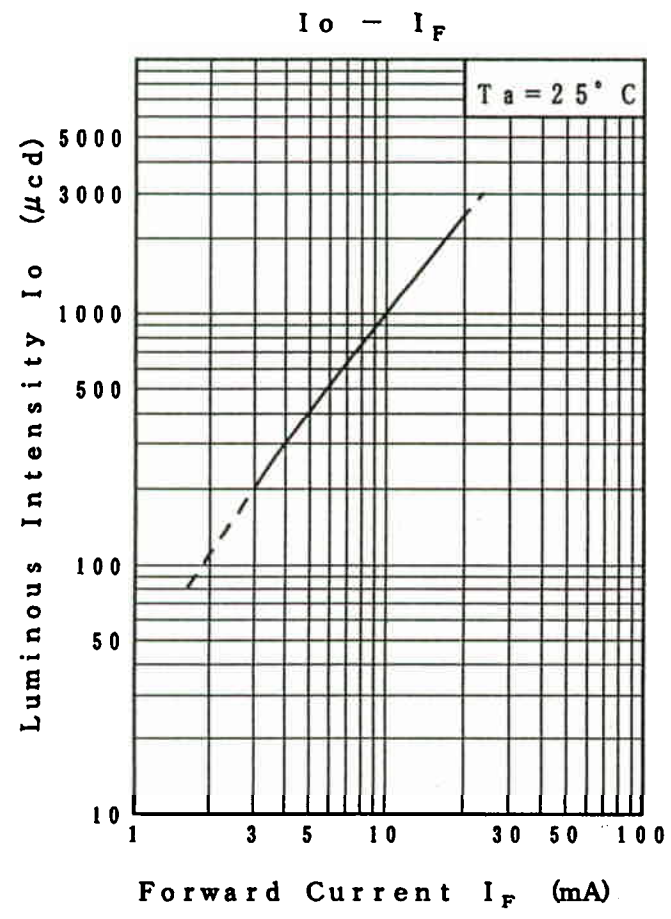
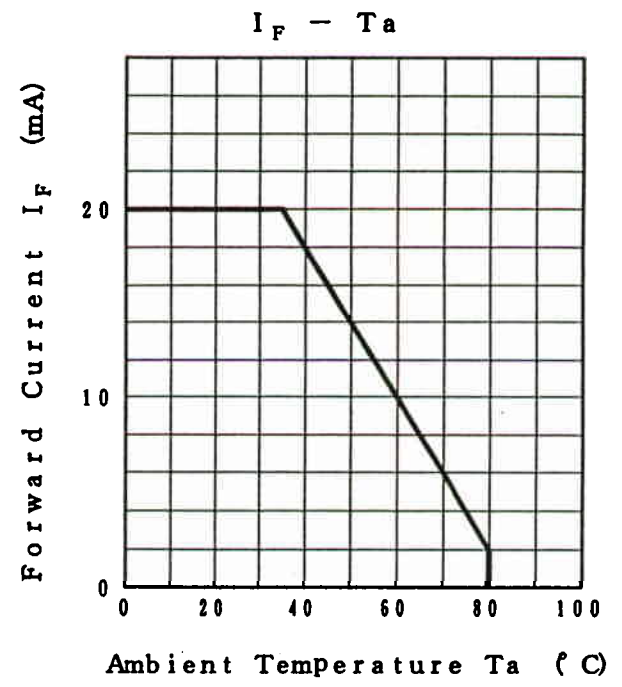
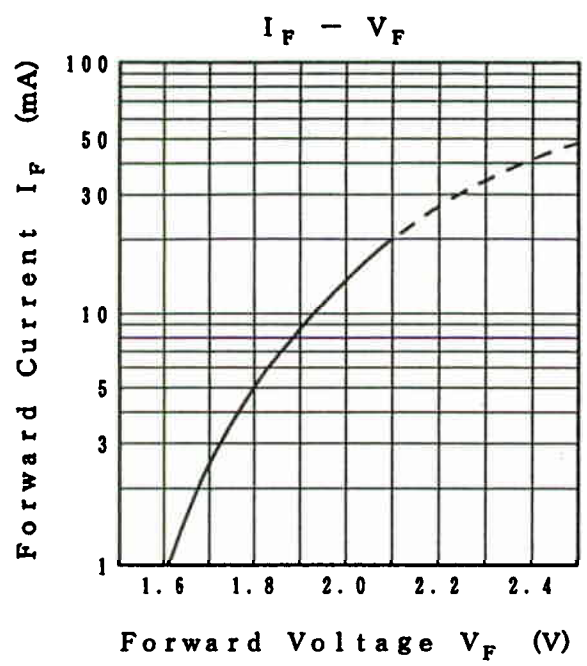
Test Specification

Item	Symbol	condition	Typ.	Limit		Unit
				Min.	Max.	
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =10mA	1.93		2.8	V
Reverse leakage Current	I <sub>R</sub>	V <sub>R</sub> = 3V			10	μA
Luminous intensity per LED	*2 I <sub>o</sub>	I <sub>FDC</sub> =10mA	1000	300		μcd
Peak Emission Wavelength	λ <sub>p</sub>	I <sub>FDC</sub> =10mA	630			nm
Spectral Line Half Width	Δλ	I <sub>FDC</sub> =10mA	40			nm

\*1 The Condition of I<sub>FP</sub> is duty 10%, pulse width 1ms.

\*2 I<sub>o</sub> scattering of the same element in the same case I<sub>o</sub> max/min ≤ 2.5  
(condition is I<sub>FDC</sub> =10mA/chip)

SEP. 25. 1998		
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Approved    Checked    Designed

*K. Senechal*    *S. T. ...*    *M. ...*

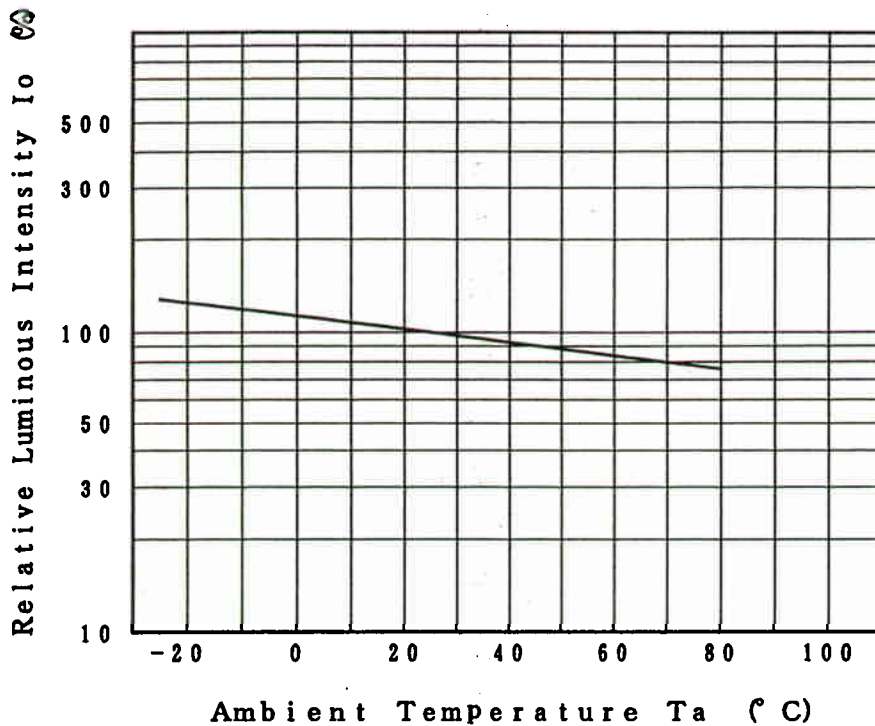
# DEVELOPMENT SPECIFICATION

P/N: LNV810105A

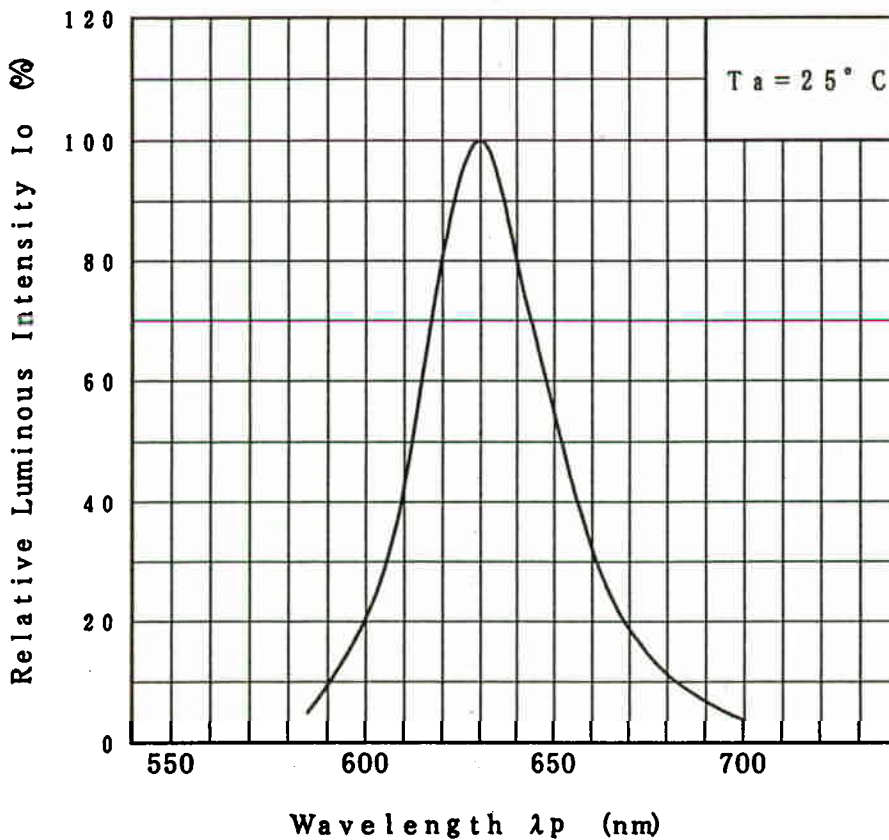
8

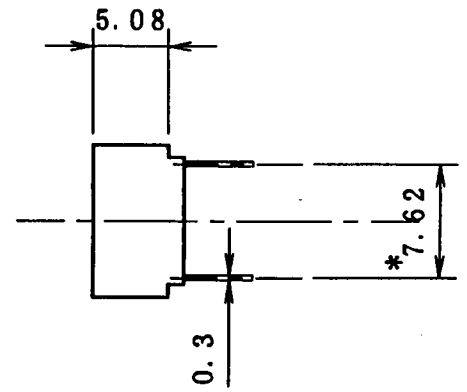
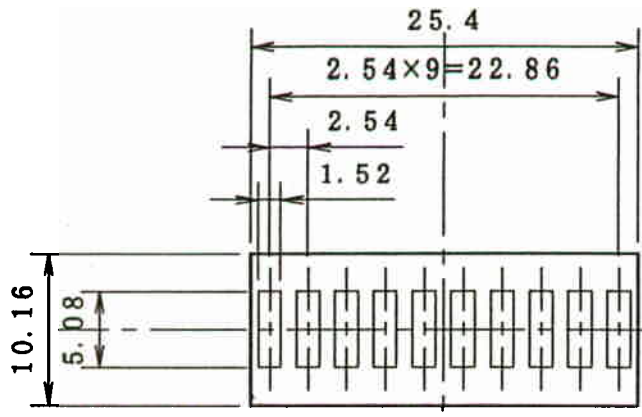
3

### $I_o - T_a$

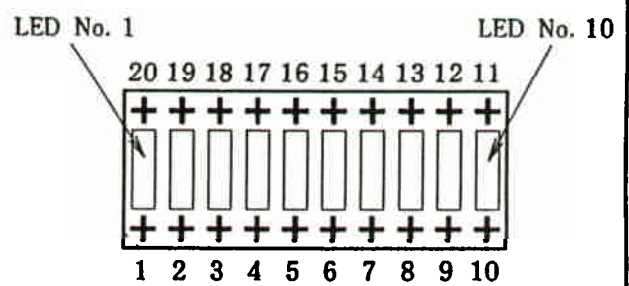
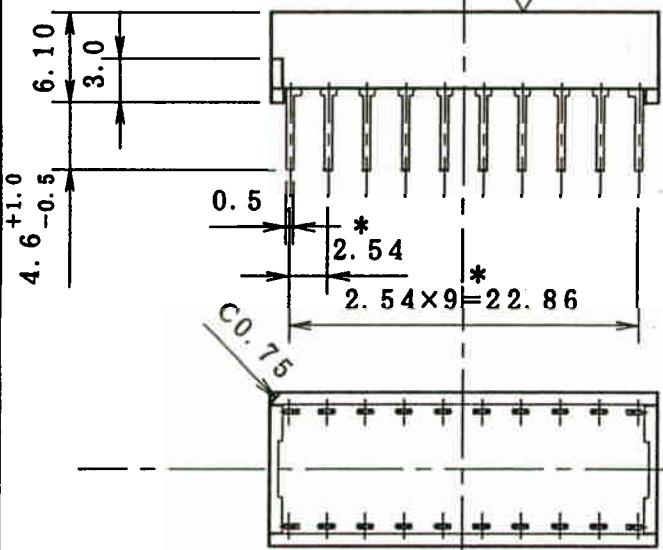


### Relative Luminous Intensity Wavelength Characteristics





Gray coating



Pin No.	Function	Pin No.	Function
1	Anode 1	11	Cathode 10
2	Anode 2	12	Cathode 9
3	Anode 3	13	Cathode 8
4	Anode 4	14	Cathode 7
5	Anode 5	15	Cathode 6
6	Anode 6	16	Cathode 5
7	Anode 7	17	Cathode 4
8	Anode 8	18	Cathode 3
9	Anode 9	19	Cathode 2
10	Anode 10	20	Cathode 1

**Notes:**

1. Dimensional tolerance without any indication shall be  $\pm 0.3$
2. "\*" Lead wire dimension. (The bottom of lead.)
3. It is out of spec for lead bending.
4. Soldering Recommendations: Max. 260°C, Less than 5 seconds.
5. Keep away at least 2 mm from resinous base of the lead.
6. Don't use freon solvent to wash.

SCALE: 2/1      THIRD ANGLE PROJECTION.      ALL DIMENSIONS IN MILLIMETERS.

SEP. 25. 1998

Approved <i>K. S. Sarda</i>	Checked <i>S. Takami</i>	Designed <i>A. Higuchi</i>	DEVELOPMENT SPECIFICATION		
P/N: LNV810105A			8		5

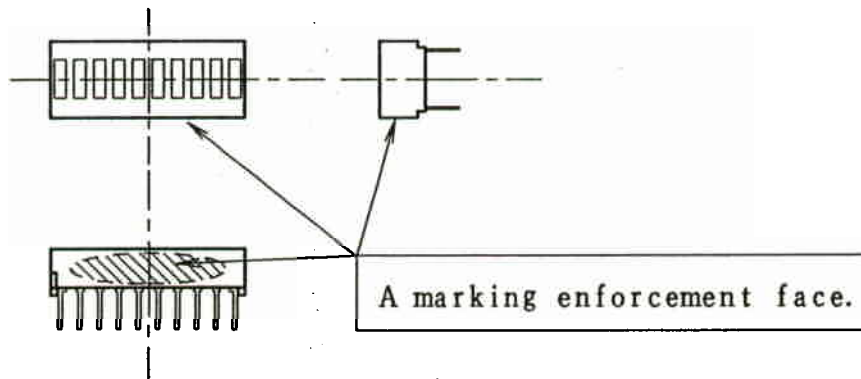
**MARKING STYLE**

**1. The contents of marking.**



- ① The trademark of Panasonic.
- ② A customer part number.
- ③ The country of origin.
- ④ A manufacturing lot number.

**2. The marking position.**



**3. Color of ink.**

BLACK

**4. The standard that gives a manufacturing lot number.**

< Example >

< Meaning >

**89**



Production : A. D. 1998, September

The month when this part was manufactured.  
 JAN:1 , FEB:2 , MAR:3 , APR:4 , MAY:5 ,  
 JUN:6 , JUL:7 , AUG:8 , SEP:9 , OCT:0 ,  
 NOV:N , DEC:D

The year when this part was manufactured.  
 1998 → 8

SEP. 25. 1998			
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Approved <i>K. Sengul</i>	Checked <i>S. Tokdemir</i>	Designed <i>M. C. Kaya</i>
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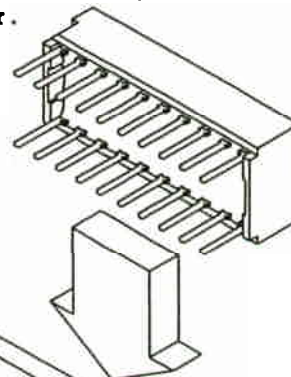
6

## PACKING STYLE

※Line the products into a sheet with their direction corresponded with each other.

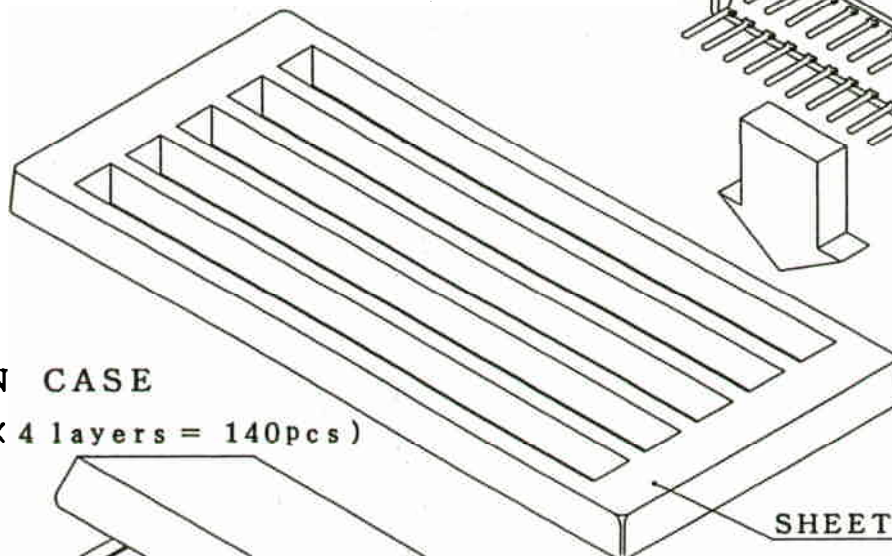
### 1. SHEET

(7 pcs × 5 lines = 35pcs)



### 2. CARTON CASE

(35 pcs × 4 layers = 140pcs)



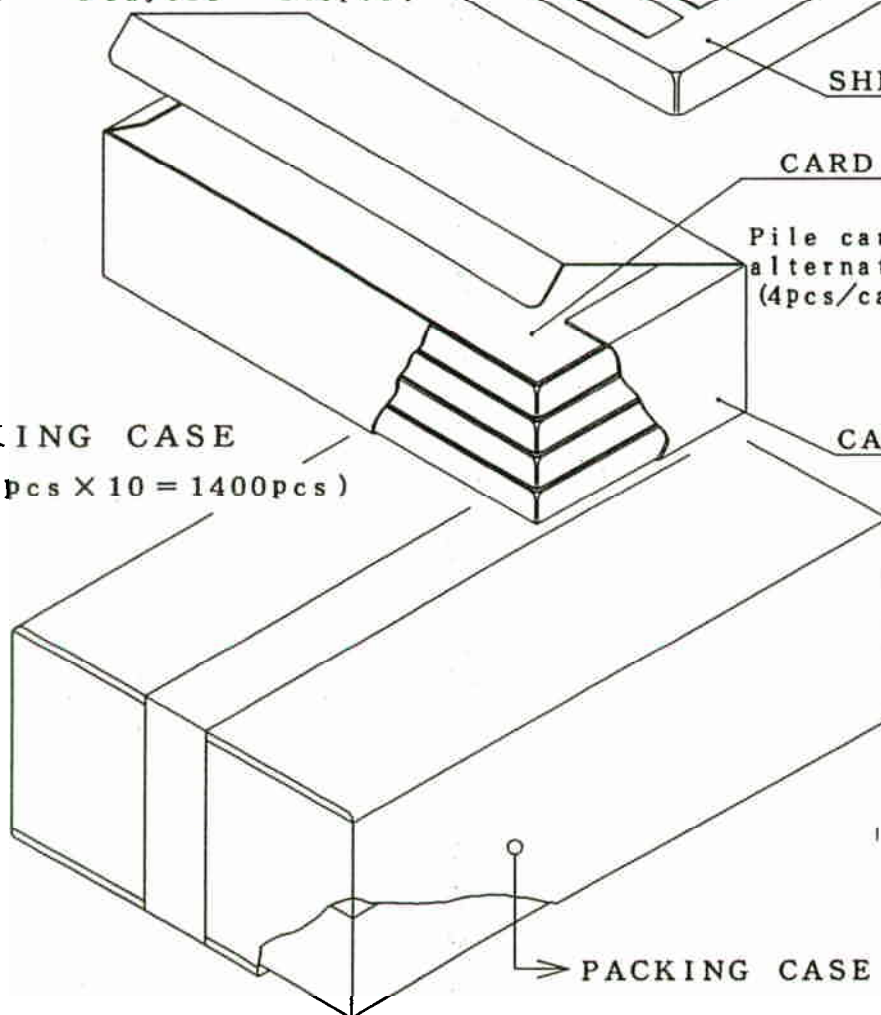
SHEET

CARD BOARD

Pile card boards up alternately with sheets.  
(4pcs/carton)

### 3. PACKING CASE

(140 pcs × 10 = 1400pcs)



CARTON CASE

PACKING CASE

### 4. Number of components used for packing.

SHEET	.....	1/35pcs	CARTON CASE	.....	1/140pcs
CARD BOARD	.....	1/35pcs	PACKING CASE	.....	1/1400pcs

SEP. 25. 1998

Approved	Checked	Designed
<i>K. Sameda</i>	<i>S. Takahashi</i>	<i>A. Nishiyama</i>

# DEVELOPMENT SPECIFICATION

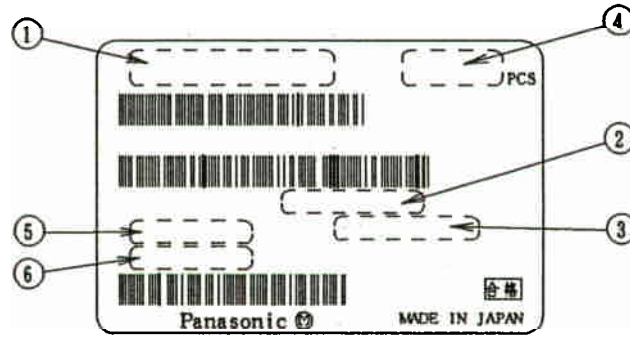
P/N: LNV810105A

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## Specification of contents entry to packing materials.

### 1. Contents that enter to a laber.

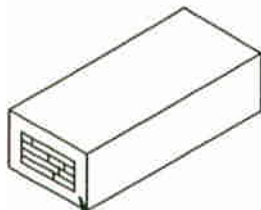


- ① — A customer number.
- ② — A maker part number.
- ③ — A maker part number.
- ④ — Packing quantity.
- ⑤ — A luminous intensity rank.  
However, we do not carry out a luminous intensity rank.
- ⑥ — A manufacturing lot number.

### 3. Label position.

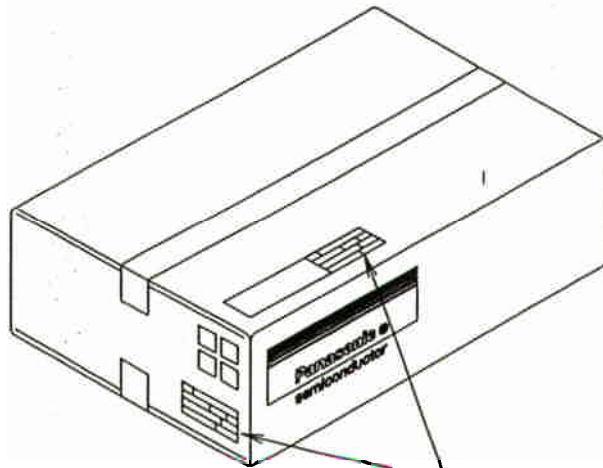
A label is attached to the position where it shows with a rough sketch.

< CARTON CASE >



Label position.

< PACKING CASE >



Label position.

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<i>K. Sameda</i>	<i>S. Takami</i>	<i>M. Niigami</i>			

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 Consult our sales staff in advance for information on the following applications:
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  - Any applications other than the standard applications intended.
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SEP.25.1998			