

**2SC2271**

2006A

NPN Triple Diffused Planar  
Silicon Transistor

(T-31-23

E493E

**Chroma Output, Horizontal  
Deflection Driver Applications**

. Small-sized color TV chroma use and B/W TV, color TV horizontal deflection driver use.

Absolute Maximum Ratings at  $T_a=25^\circ\text{C}$ 

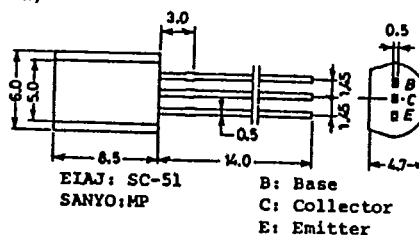
|                              |           |             | unit             |
|------------------------------|-----------|-------------|------------------|
| Collector to Base Voltage    | $V_{CB0}$ | 300         | V                |
| Collector to Emitter Voltage | $V_{CE0}$ | 300         | V                |
| Emitter to Base Voltage      | $V_{EB0}$ | 6           | V                |
| Collector Current            | $I_C$     | 100         | mA               |
| Peak Collector Current       | $i_{cp}$  | 300         | mA               |
| Collector Dissipation        | $P_C$     | 900         | mW               |
| Junction Temperature         | $T_j$     | 150         | $^\circ\text{C}$ |
| Storage Temperature          | $T_{stg}$ | -55 to +150 | $^\circ\text{C}$ |

Electrical Characteristics at  $T_a=25^\circ\text{C}$ 

|                           |               |                                      | min | typ | max  | unit          |
|---------------------------|---------------|--------------------------------------|-----|-----|------|---------------|
| Collector Cut Off Current | $I_{CBO}$     | $V_{CB}=200\text{V}, I_E=0$          |     |     | 1.0  | $\mu\text{A}$ |
| Emitter Cut Off Current   | $I_{EBO}$     | $V_{EB}=6\text{V}, I_C=0$            |     |     | 1.0  | $\mu\text{A}$ |
| DC Current Gain           | $h_{FE}$      | $V_{CE}=10\text{V}, I_C=10\text{mA}$ | 40* |     | 200* |               |
| Gain Band Width Product   | $f_T$         | $V_{CE}=30\text{V}, I_C=10\text{mA}$ | 50  |     |      | MHz           |
| Output Capacitance        | $c_{ob}$      | $V_{CB}=10\text{V}, f=1\text{MHz}$   |     |     | 7.5  | pF            |
| C-E Saturation Voltage    | $V_{CE(sat)}$ | $I_C=20\text{mA}, I_B=2\text{mA}$    |     |     | 0.6  | V             |
| B-E Saturation Voltage    | $V_{BE(sat)}$ |                                      |     |     | 1.0  | V             |

\* The 2SC2271 is classified by 10mA  $h_{FE}$  as follows.

|    |   |    |    |   |     |     |   |     |
|----|---|----|----|---|-----|-----|---|-----|
| 40 | C | 80 | 60 | D | 120 | 100 | E | 200 |
|----|---|----|----|---|-----|-----|---|-----|

Case Outline 2006A  
(unit:mm)

The 2SC2271 is scheduled to be discontinued soon. Use the 2SC3468, instead of the 2SC2271, in new applications where you are planning to use the 2SC2271.

4157KI/3195MW, TS No. 493-1/2

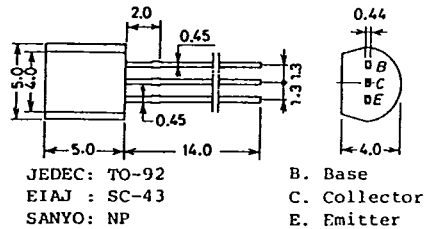
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## CASE OUTLINES AND ATTACHMENTS

- All of Sanyo Transistor case outlines are illustrated below.
- All dimensions are in mm, and dimensions which are not followed by min. or max. are represented by typical values.
- No marking is indicated.

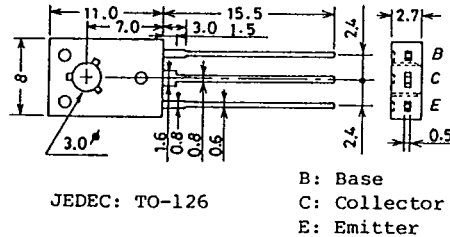
Case Outline—[2003A]

unit:mm



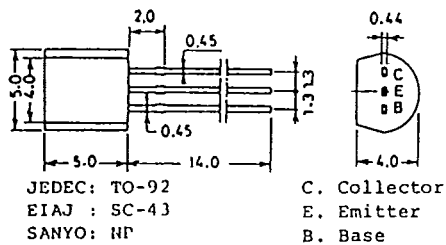
Case Outline—[2009A]

unit:mm



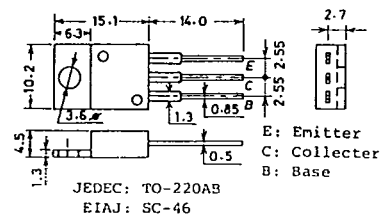
Case Outline—[2004A]

unit:mm



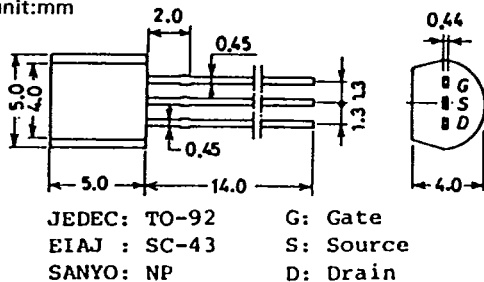
Case Outline—[2010A]

unit:mm



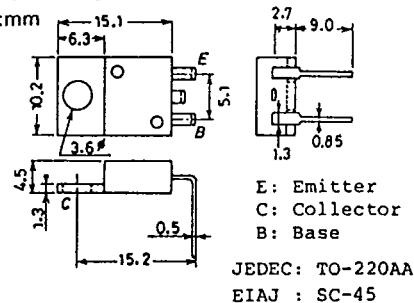
Case Outline—[2005A]

unit:mm



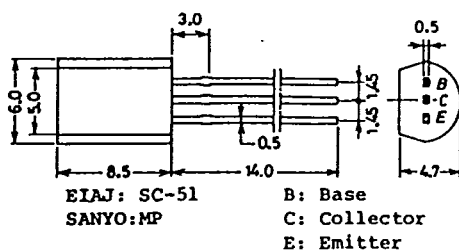
Case Outline—[2012]

unit:mm



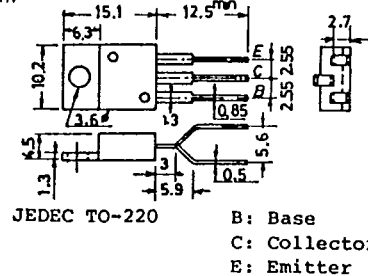
Case Outline—[2006A]

unit:mm

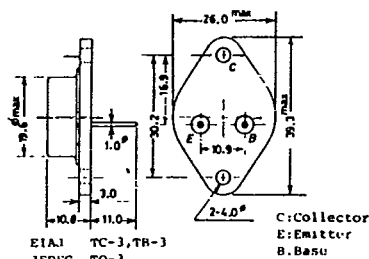


Case Outline—[2013]

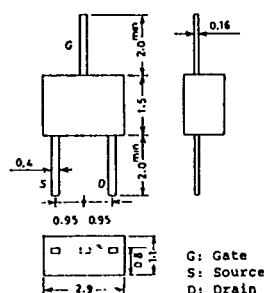
unit:mm



unit:mm

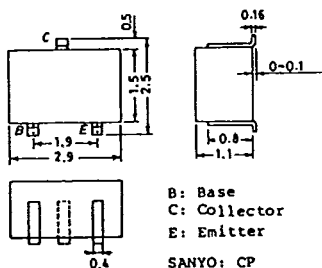


unit:mm

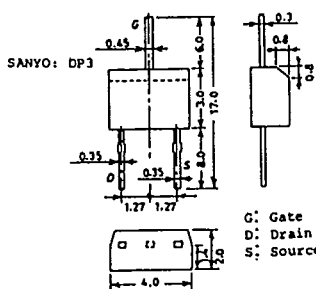


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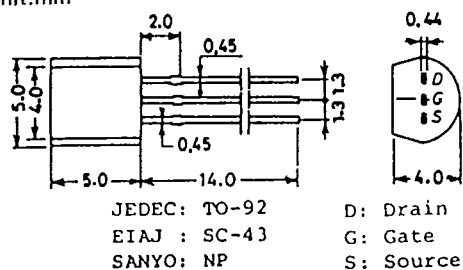
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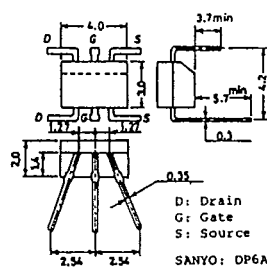
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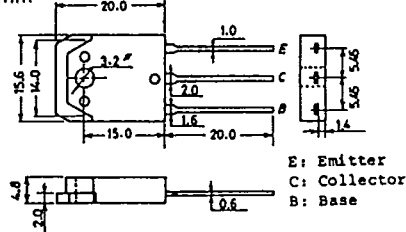
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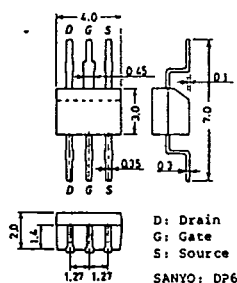
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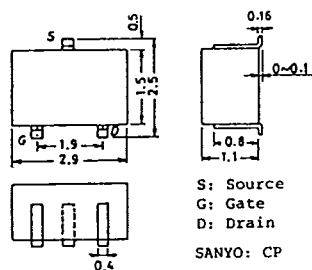
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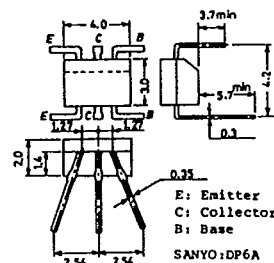
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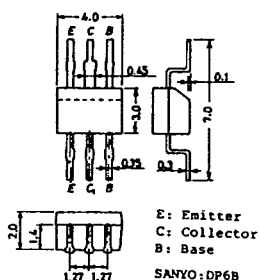
unit:mm



unit:mm

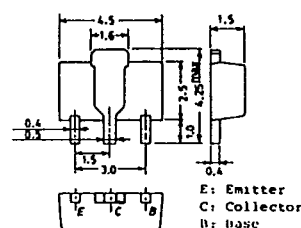


unit:mm



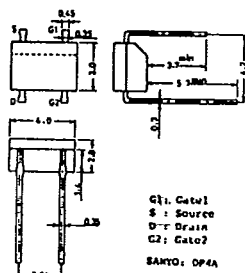
E: Emitter  
C: Collector  
B: Base  
SANYO: DP6B

unit:mm



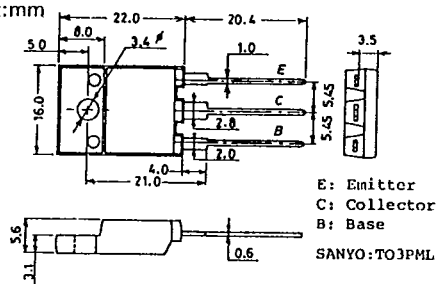
E: Emitter  
C: Collector  
B: Base  
SANYO: KIP

unit:mm



G1: Catw1  
\$ : Source  
D-r Drain  
G2: Gate2  
SANYO: Osaka

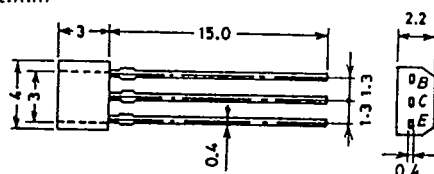
unit:mm



E: Emitter  
C: Collector  
B: Base

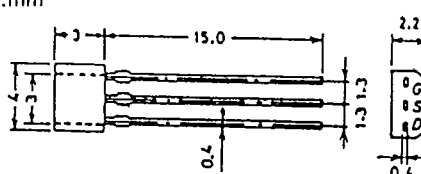
SANYO:TO3PML

unit:mm



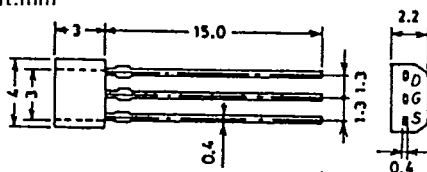
B: Base  
C: Collector  
E: Emitter  
SANYO: SPA

unit:mm



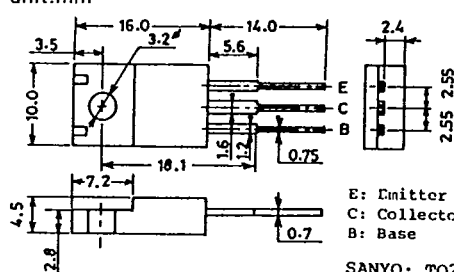
G: Gate  
S: Source  
D: Drain  
SANYO: SPA

unit:mm



D: Drain  
G: Gate  
S: Source  
SANYO: SPA

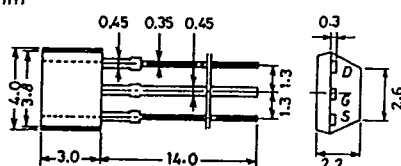
unit:mm



E: Emitter  
C: Collector  
B: Base

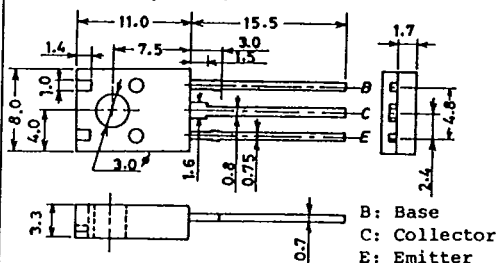
SANYO: TO22

unit:mm



D: Drain  
G: Gate  
S: Source  
SANYO: SP'

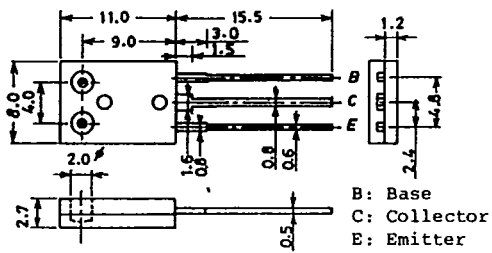
11.0



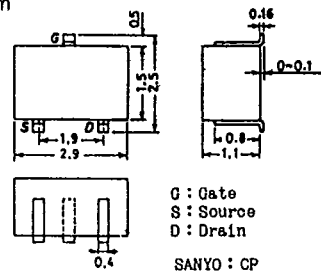
B: Base  
C: Collector  
E: Emitter

SANYO: TO126ML

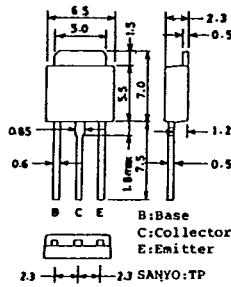
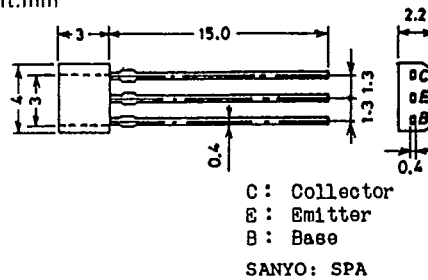
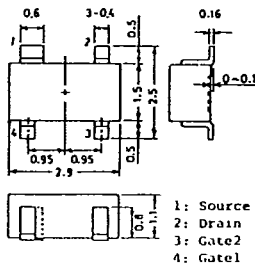
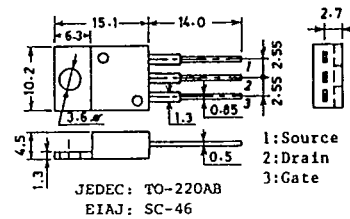
Case Outline—[2043A] unit:mm



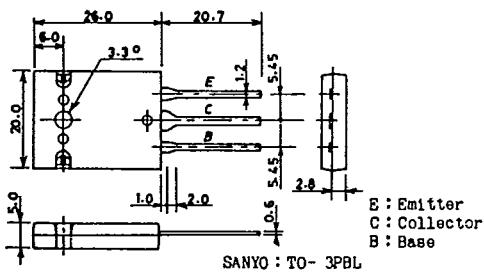
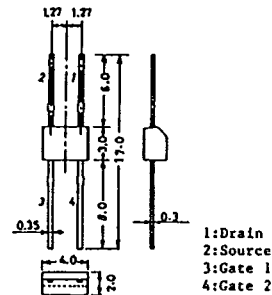
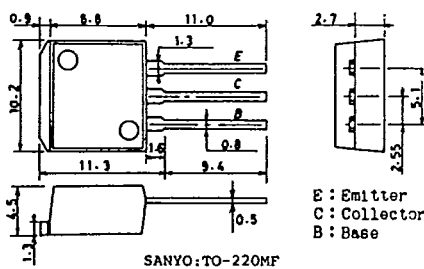
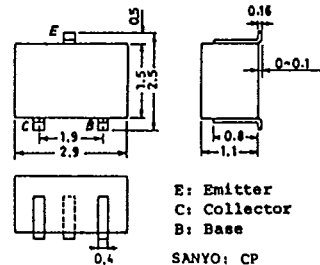
SANYO: TO126LP

Case Outline—[2050]  
unit:mm

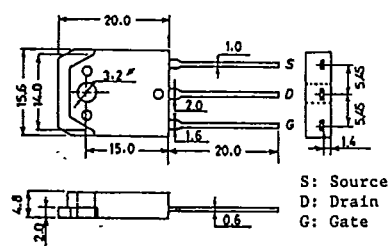
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Case Outline—[2045]  
unit:mmCase Outline—[2051]  
unit:mmCase Outline—[2046]  
unit:mmCase Outline—[2052A]  
unit:mm

Case Outline—[2048] unit:mm

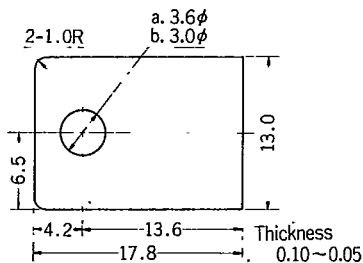
Case Outline—[2053]  
unit:mmCase Outline—[2049]  
unit:mmCase Outline—[2054]  
unit:mm

Case Outline—[2056] unit:mm



SANYO: TO3PB

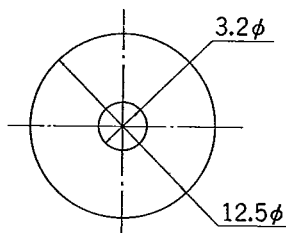
Case Outline—[0008] unit:mm

a. IS-313B  
b. IS-313D

SANYO

Case Outline—[0004] unit:mm

unit:mm

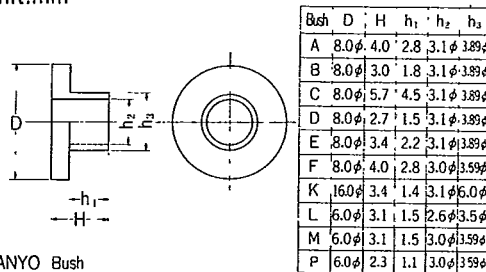


SANYO IS-126

Thickness : 0.075

Case Outline—[0009] unit:mm

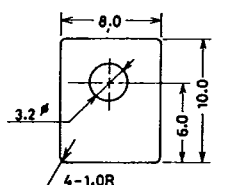
unit:mm



SANYO Bush

Case Outline—[0005] unit:mm

unit:mm

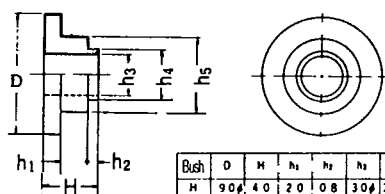


Thickness : 0.075

SANYO IS-126A Mica

Case Outline—[0010] unit:mm

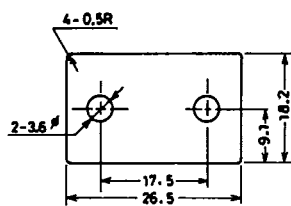
unit:mm



SANYO Bush

Case Outline—[0006] unit:mm

unit:mm

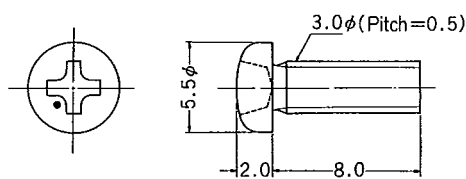


Thickness : 0.05~0.1

SANYO IS-20MA Mica

Case Outline—[0011] unit:mm

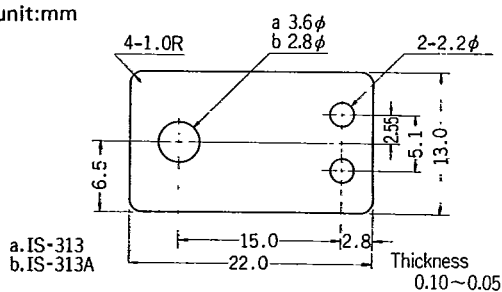
unit:mm



JIS No. B1111 M3×0.5

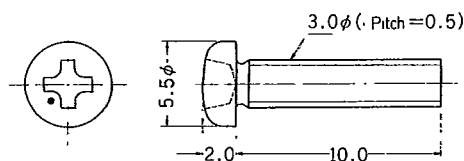
Case Outline—[0007] unit:mm

unit:mm



Case Outline—[0012] unit:mm

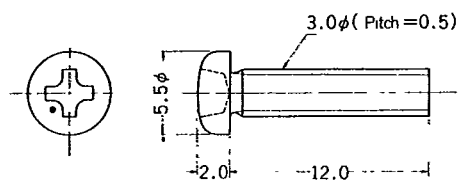
unit:mm



JIS No. B1111 M3×0.5

Case Outline—[0013]

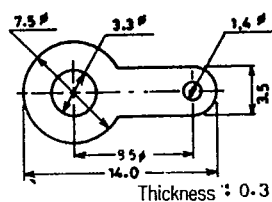
unit:mm



JIS No. B1111 M3×0.5

Case Outline—[0018]

unit:mm

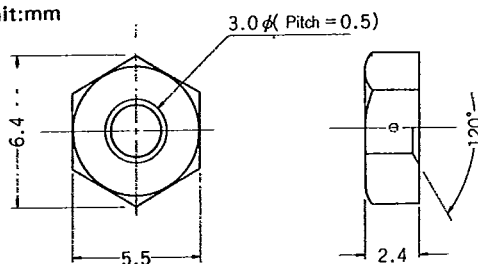


SANYO Lug 1.4

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Case Outline—[0014]

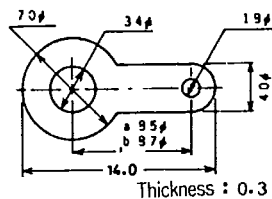
unit:mm



JIS No. B1181 M3×0.5

Case Outline—[0019]

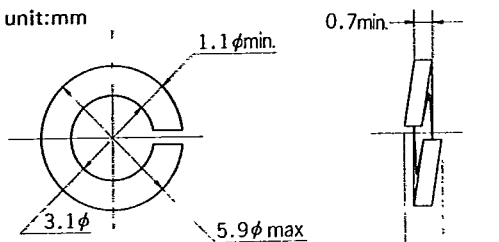
unit:mm



SANYO Lug 1.8φ

Case Outline—[0015]

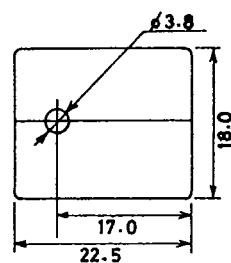
unit:mm



JIS No. B 1251 Spring washer (M3)

Case Outline—[0020]

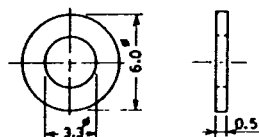
unit:mm



SANYO IS-3MP Mica

Case Outline—[0016]

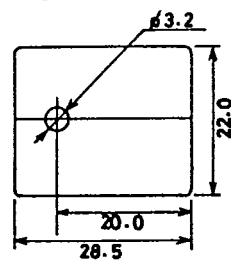
unit:mm



JIS No. B1252 Flat washer

Case Outline—[0021]

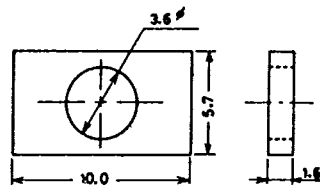
unit:mm



SANYO IS-MPC Mica

Case Outline—[0017]

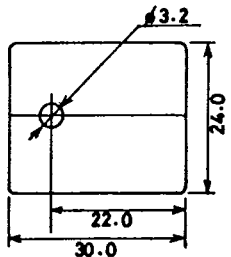
unit:mm



JIS No. G3141 Rectangular washer

Case Outline—[0022]

unit:mm



SANYO IS-3PBL Mica