

2SK775



2052A

N-Channel MOS Silicon Field-Effect Transistor

Very High Speed Switching Applications

Ⓔ2559

Features

- Low ON resistance, very high-speed switching

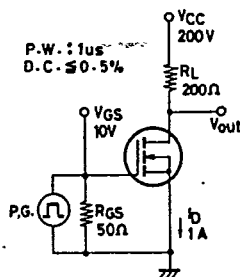
Absolute Maximum Ratings at Ta=25°C

Absolute Maximum Ratings at Ta=25°C		unit
Drain to Source Voltage	V _{DSS}	450 V
Gate to Source Voltage	V _{GSS}	±20 V
Drain Current (D.C)	I _D	2 A
Drain Current (pulse)	I _{D peak}	5 A
Allowable Power Dissipation	P _D	50 W
Junction Temperature	T _J	150 °C
Storage Temperature	T _{stg}	-55 to +150 °C

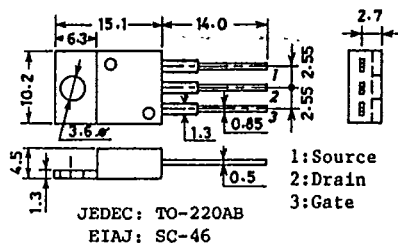
Electrical Characteristics at Ta=25°C

Electrical Characteristics at Ta=25°C			min	typ	max	unit
D-S Breakdown Voltage	V_{DS}	$I_D=1mA, V_{GS}=0$	450			V
D-S Cutoff Current	I_{DSS}	$V_{DS}=450V, V_{GS}=0$			1.0	mA
G-S Leakage Current	I_{GSS}	$V_{GS}=\pm 20V, V_{DS}=0$			± 100	nA
G-S Cutoff Current	$I_{GS(off)}$	$V_{DS}=10V, I_D=1mA$	1.5		4.0	V
Forward Transfer	$ Y_{fs} $	$V_{DS}=10V, I_D=1A$	0.6	1.2		S
Admittance						
Saturation Resistance	$R_{DS(on)}$	$I_D=1A, V_{GS}=10V$		2.5	3.5	ohm
Input Capacitance	C_{iss}	$V_{DS}=20V, f=1MHz$		400		pF
Output Capacitance	C_{oss}	$V_{DS}=20V, f=1MHz$		50		pF
Reverse Transfer	C_{rss}	$V_{DS}=20V, f=1MHz$		10		pF
Capacitance						
Turn-on Delay Time	$t_{d(on)}$	$I_D=1A, V_{GS}=10V$ $V_{CC}=200V, R_{GS}=50ohms$		15	30	ns
Rise Time	t_r			15	30	ns
Turn-off Delay Time	$t_{d(off)}$			50	100	ns
Fall Time	t_f			25	50	ns

Switching Time Test Circuit



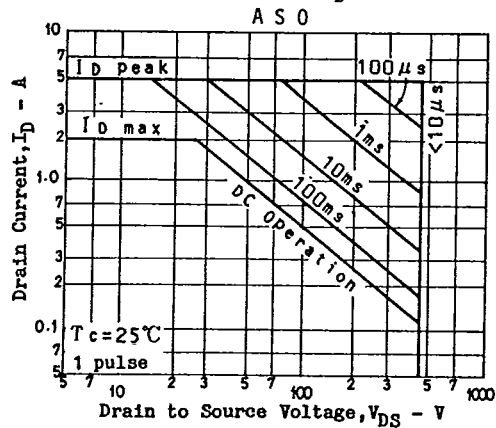
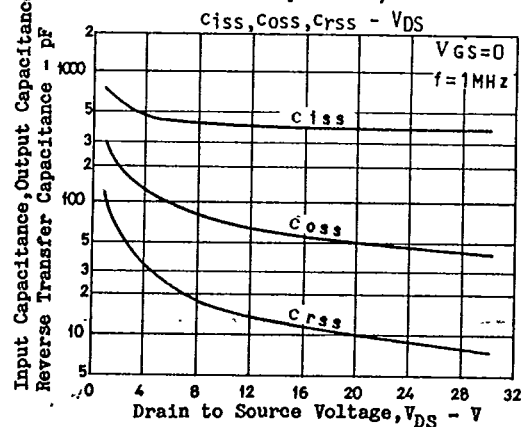
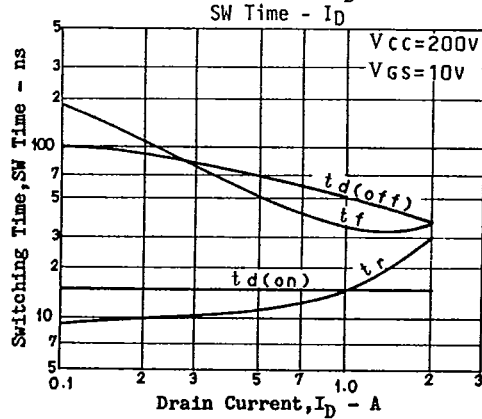
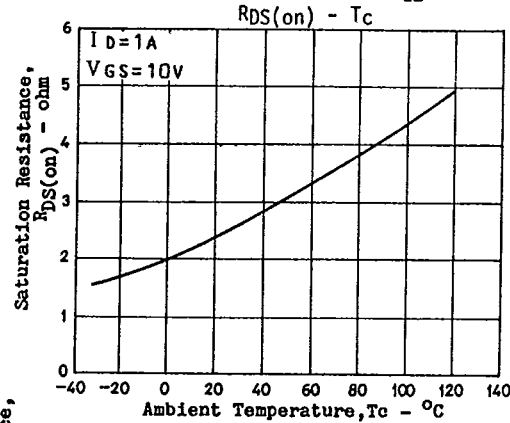
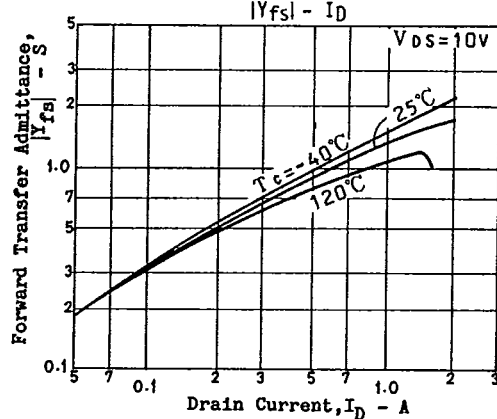
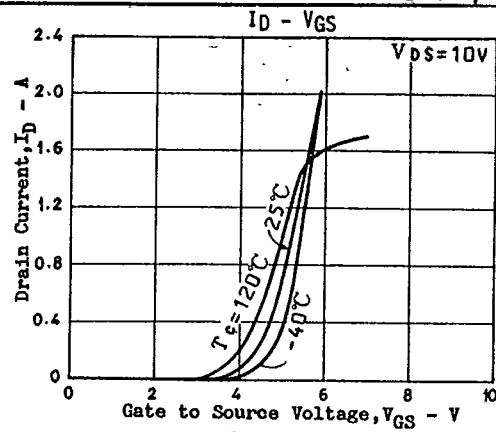
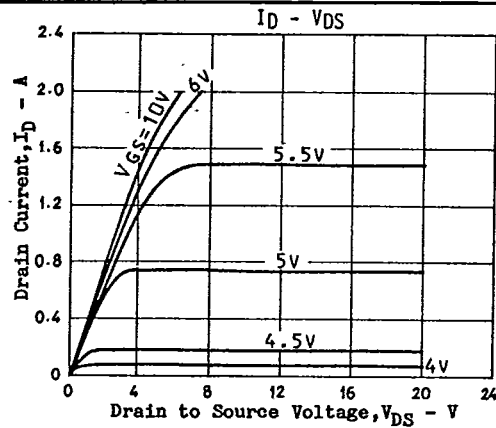
Case Outline 2052A
(unit:mm)



Note: Be carefull in handling the 2SK775 because it has no protect diode between gate and source.

2SK775

(T-39-11)



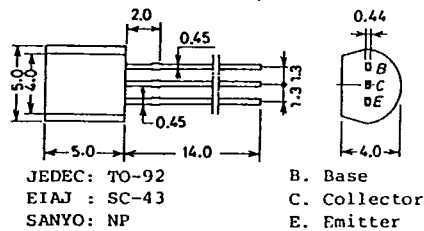
T-91-20

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.

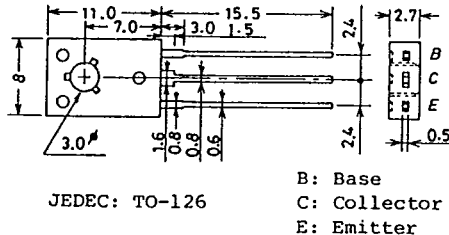
Case Outline—[2003A]

unit:mm



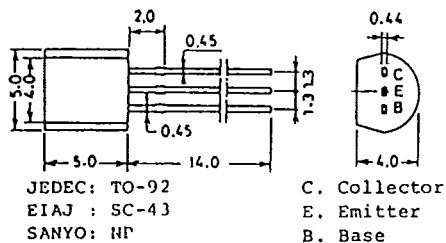
Case Outline—[2009A]

unit:mm



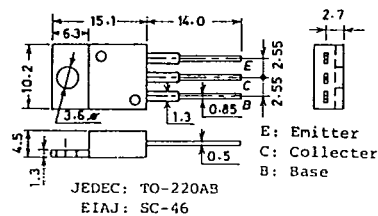
Case Outline—[2004A]

unit:mm



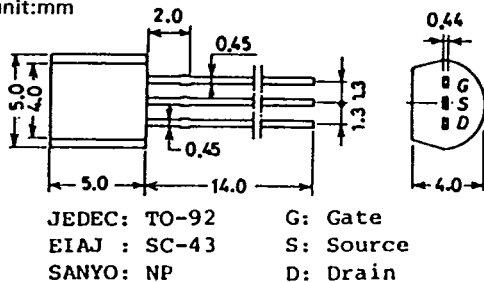
Case Outline—[2010A]

unit:mm



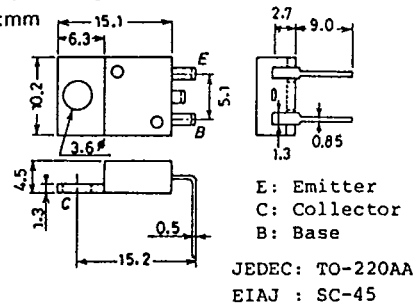
Case Outline—[2005A]

unit:mm



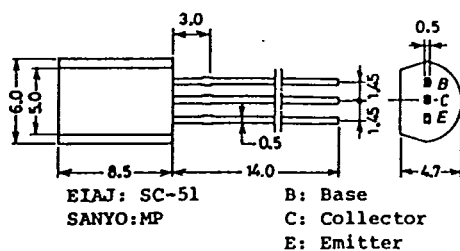
Case Outline—[2012]

unit:mm



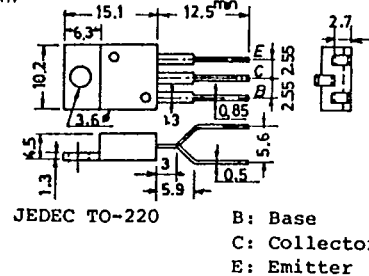
Case Outline—[2006A]

unit:mm

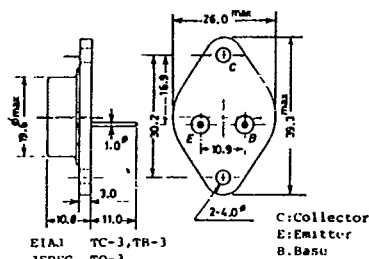


Case Outline—[2013]

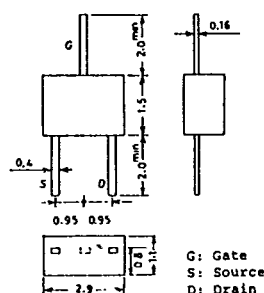
unit:mm



unit:mm

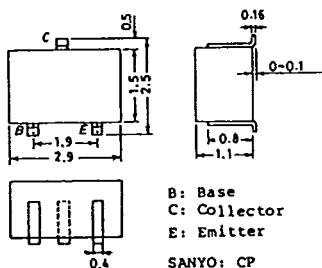


unit:mm

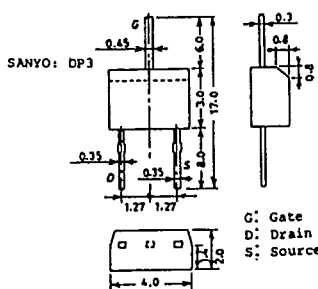


T-91-20

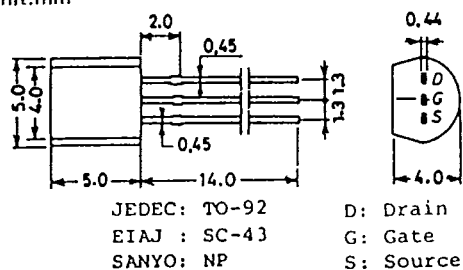
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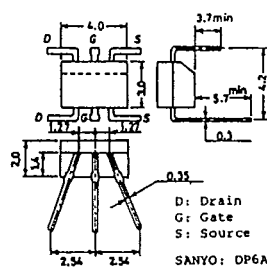
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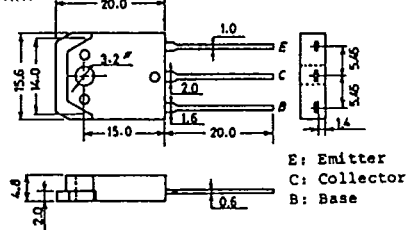
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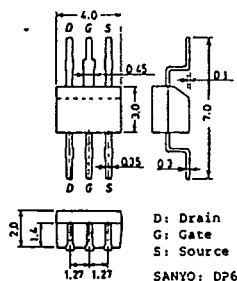
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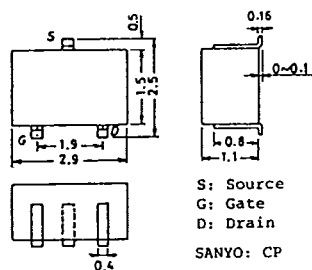
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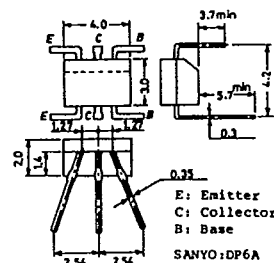
unit:mm



unit:mm



unit:mm



E: Emitter
C: Collector
B: Base

SANYO:DP6B

E: Emitter
C: Collector
B: Base

G1: Cat1
\$: Source
D-r Drain
G2: Gate2
SANYO: OP4A

E: Emitter
C: Collector
B: Base

SANYO:TO3PML

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

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

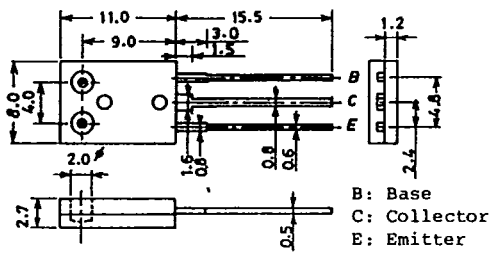
D: Drain
G: Gate
S: Source
SANYO: SPA

SANYO: TO220ML

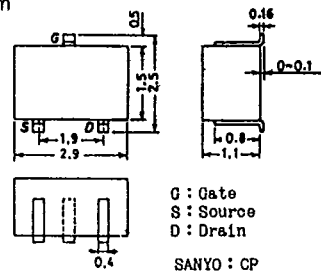
D: Drain
G: Gate
S: Source
SANYO: SP'

SANYO: TO126ML

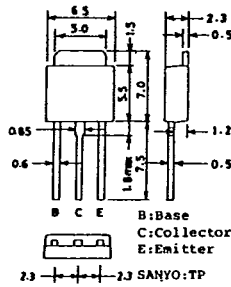
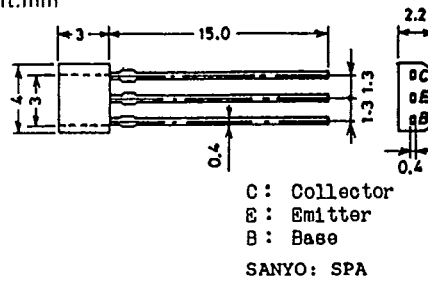
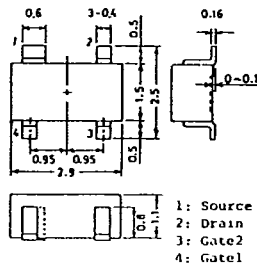
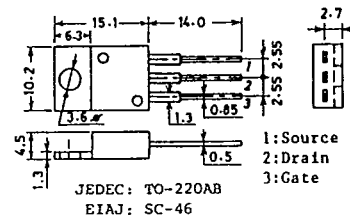
Case Outline—[2043A] unit:mm



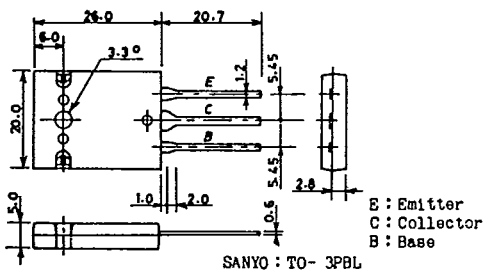
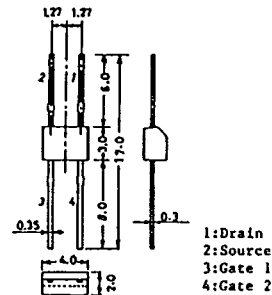
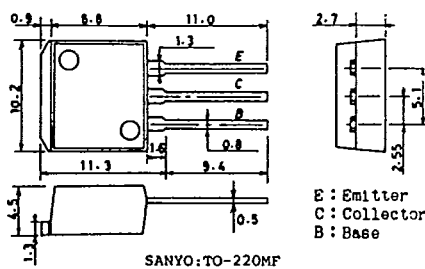
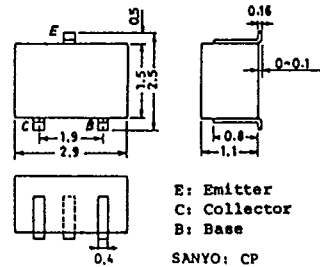
SANYO: TO126LP

Case Outline—[2050]
unit:mm

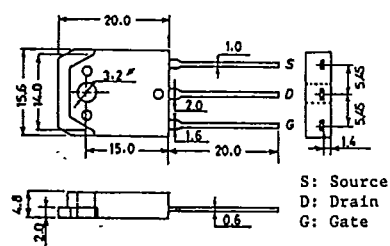
T-91-20

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

Case Outline—[2048] unit:mm

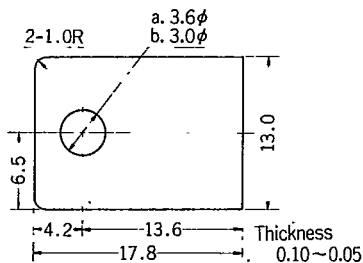
Case Outline—[2053]
unit:mmCase Outline—[2049]
unit:mmCase Outline—[2054]
unit:mm

Case Outline—[2056] unit:mm



SANYO: TO3PB

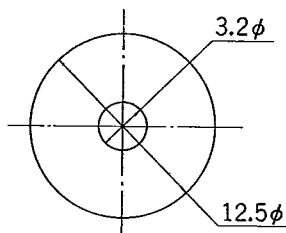
Case Outline—[0008] unit:mm

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

SANYO

Case Outline—[0004] unit:mm

unit:mm

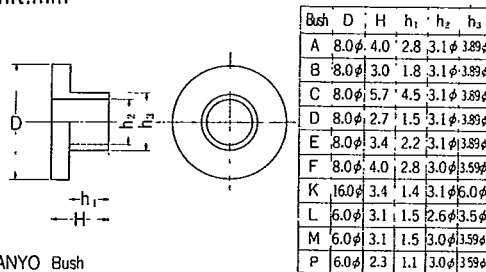


SANYO IS-126

Thickness : 0.075

Case Outline—[0009] unit:mm

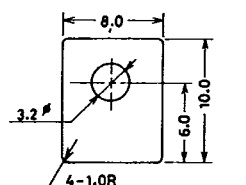
unit:mm



SANYO Bush

Case Outline—[0005] unit:mm

unit:mm

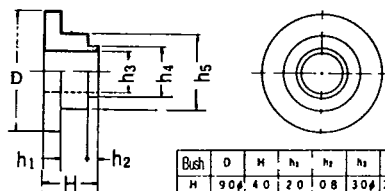


Thickness : 0.075

SANYO IS-126A Mica

Case Outline—[0010] unit:mm

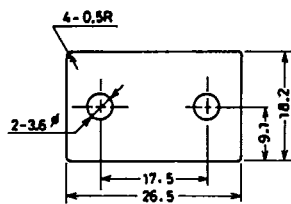
unit:mm



SANYO Bush

Case Outline—[0006] unit:mm

unit:mm

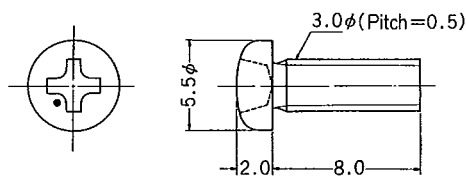


Thickness : 0.05~0.1

SANYO IS-20MA Mica

Case Outline—[0011] unit:mm

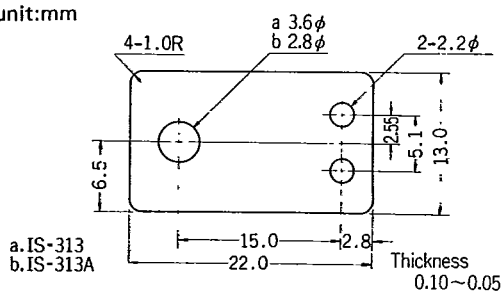
unit:mm



JIS No. B1111 M3×0.5

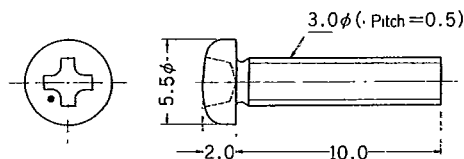
Case Outline—[0007] unit:mm

unit:mm



Case Outline—[0012] unit:mm

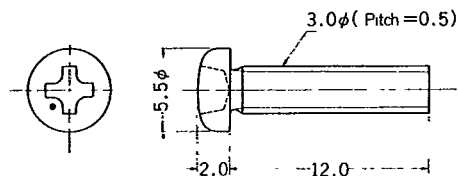
unit:mm



JIS No. B1111 M3×0.5

Case Outline—[0013]

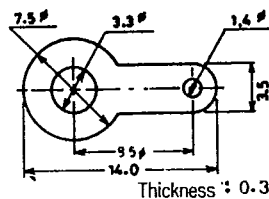
unit:mm



JIS No. B1111 M3×0.5

Case Outline—[0018]

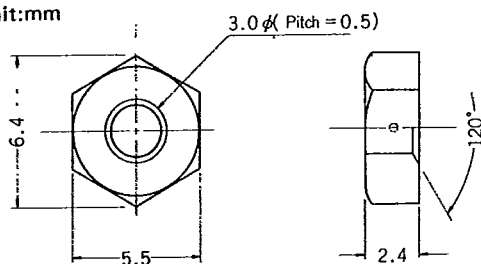
unit:mm



SANYO Lug 1.4

Case Outline—[0014]

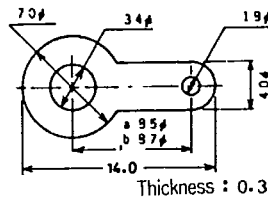
unit:mm



JIS No. B1181 M3×0.5

Case Outline—[0019]

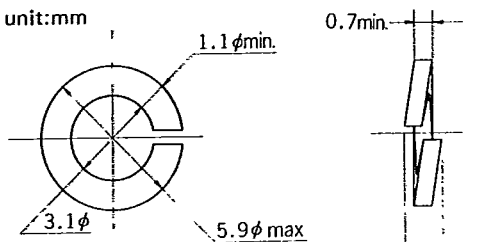
unit:mm



SANYO Lug 1.8φ

Case Outline—[0015]

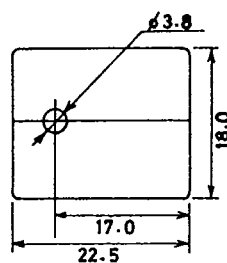
unit:mm



JIS No. B 1251 Spring washer (M3)

Case Outline—[0020]

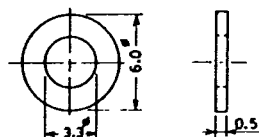
unit:mm



SANYO IS-3MP Mica

Case Outline—[0016]

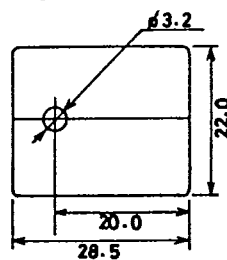
unit:mm



JIS No. B1252 Flat washer

Case Outline—[0021]

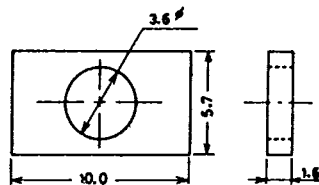
unit:mm



SANYO IS-MPC Mica

Case Outline—[0017]

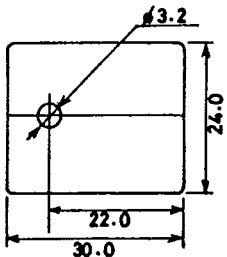
unit:mm



JIS No. G3141 Rectangular washer

Case Outline—[0022]

unit:mm



SANYO IS-3PBL Mica