

# 2SD1914



2043A

NPN Epitaxial Planar Silicon Darlington Transistor

T-33-29

## Driver Applications

©2453

### Applications

- Motor drivers, printer hammer drivers, relay drivers, voltage regulator control

### Features

- Darlington connection
- High DC current gain

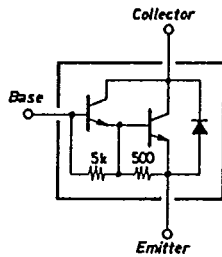
### Absolute Maximum Ratings at Ta=25°C

			unit
Collector to Base Voltage	V <sub>CB0</sub>	100	V
Collector to Emitter Voltage	V <sub>CE0</sub>	80	V
Emitter to Base Voltage	V <sub>EB0</sub>	6	V
Collector Current	I <sub>C</sub>	2	A
Peak Collector Current	i <sub>cp</sub>	4	A
Collector Dissipation	P <sub>C</sub>	1.2	W
		10	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

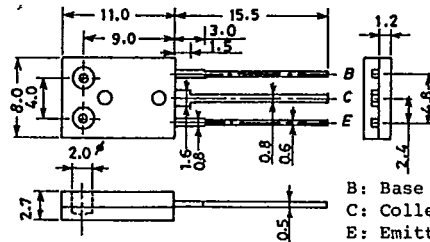
### Electrical Characteristics at Ta=25°C

			min	typ	max	unit
Collector Cutoff Current	I <sub>CB0</sub>	V <sub>CB</sub> =60V, I <sub>E</sub> =0			10	uA
Emitter Cutoff Current	I <sub>EB0</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0			2.5	mA
DC Current Gain	h <sub>FE</sub> (1)	V <sub>CE</sub> =3V, I <sub>C</sub> =500mA	1000			
		V <sub>CE</sub> =3V, I <sub>C</sub> =1A	2000	30000		
C-E Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =1A, I <sub>B</sub> =2mA		1.0	1.5	V
B-E Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =1A, I <sub>B</sub> =2mA		1.6	2.0	V
C-B Breakdown Voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =100uA, I <sub>E</sub> =0	100			V
C-E Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =25mA, R <sub>BE</sub> =∞	80			V

### Electrical Connection



### Case Outline 2043A (unit:mm)



B: Base  
C: Collector  
E: Emitter

SANYO: T0126LP

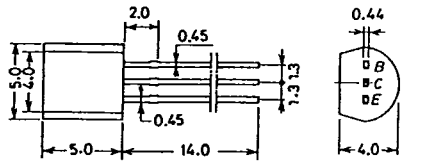
T-91-20

# 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

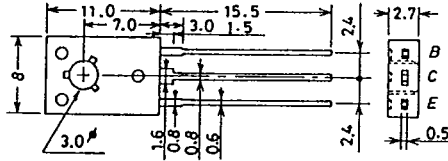


JEDEC: TO-92  
EIAJ: SC-43  
SANYO: NP

B. Base  
C. Collector  
E. Emitter

Case Outline-[2009A]

unit:mm

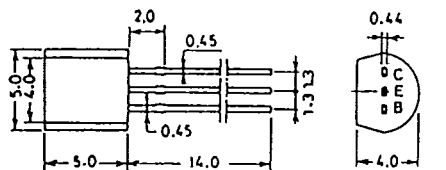


JEDEC: TO-126

B: Base  
C: Collector  
E: Emitter

Case Outline-[2004A]

unit:mm

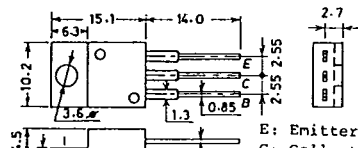


JEDEC: TO-92  
EIAJ: SC-43  
SANYO: NP

C. Collector  
E. Emitter  
B. Base

Case Outline-[2010A]

unit:mm

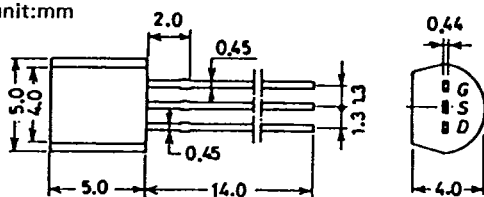


JEDEC: TO-220AB  
EIAJ: SC-46

E: Emitter  
C: Collector  
B: Base

Case Outline-[2005A]

unit:mm

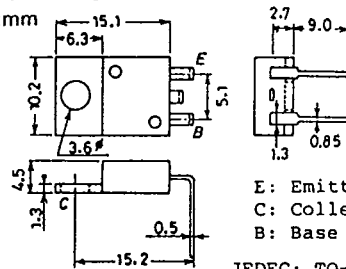


JEDEC: TO-92  
EIAJ: SC-43  
SANYO: NP

G: Gate  
S: Source  
D: Drain  
B: Base  
C: Collector

Case Outline-[2012]

unit:mm

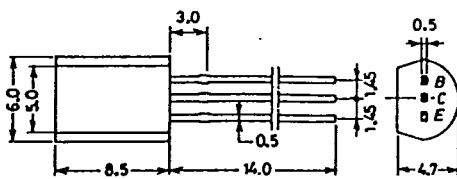


JEDEC: TO-220AA  
EIAJ: SC-45

E: Emitter  
C: Collector  
B: Base

Case Outline-[2006A]

unit:mm

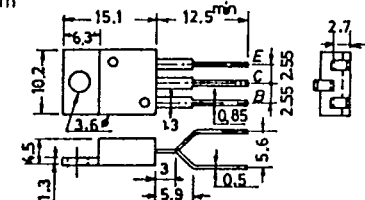


EIAJ: SC-51  
SANYO: MP

B: Base  
C: Collector  
E: Emitter

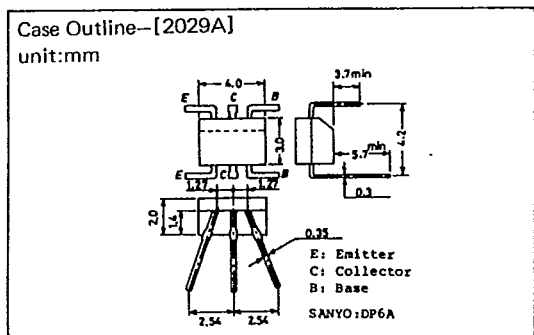
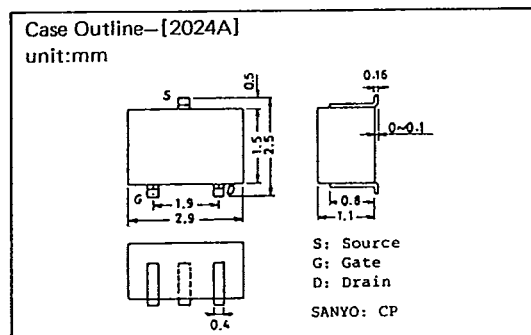
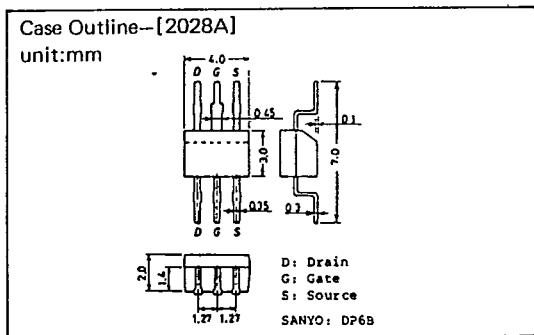
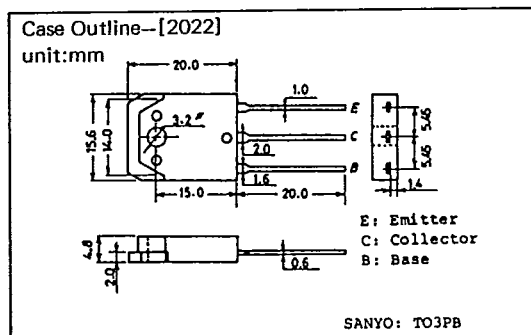
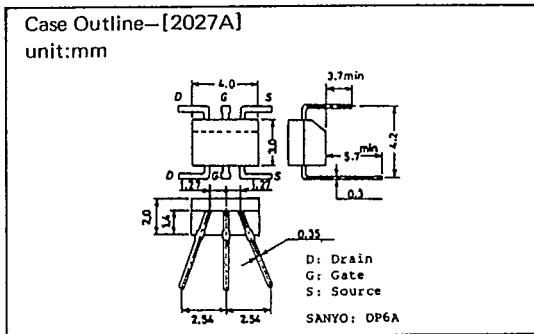
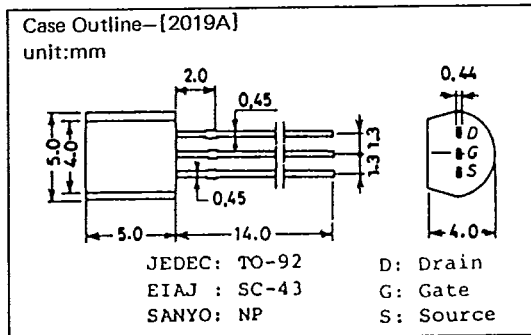
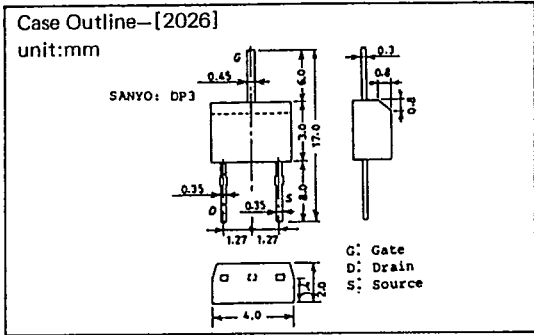
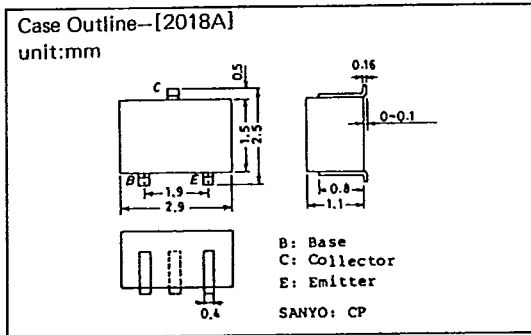
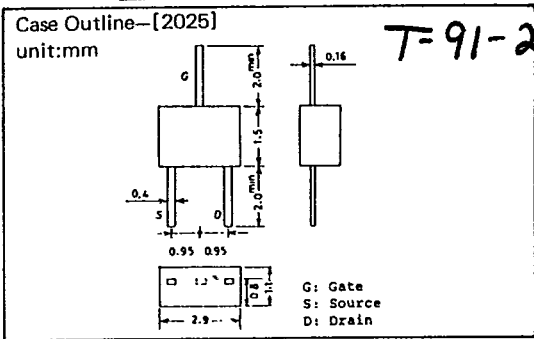
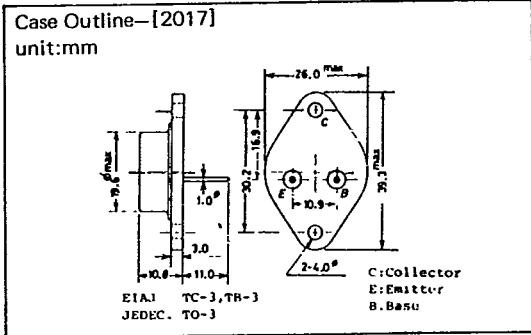
Case Outline-[2013]

unit:mm

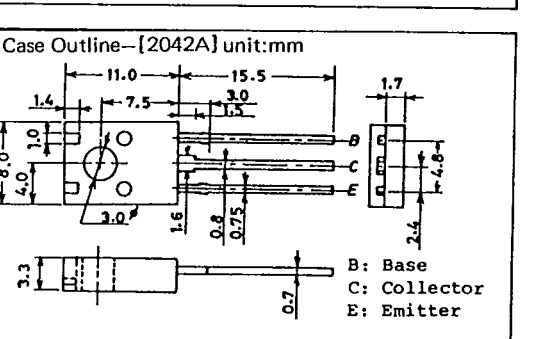
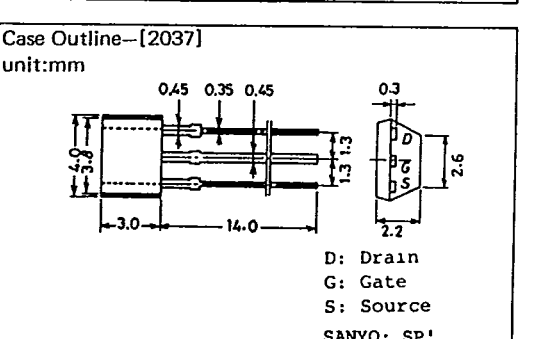
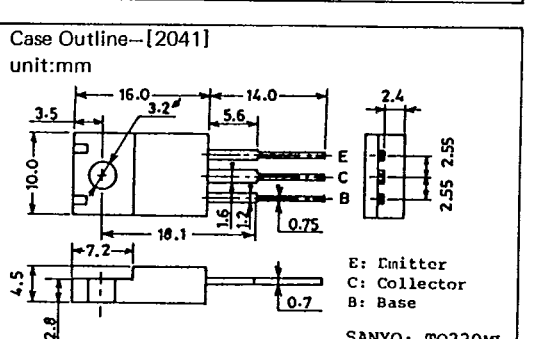
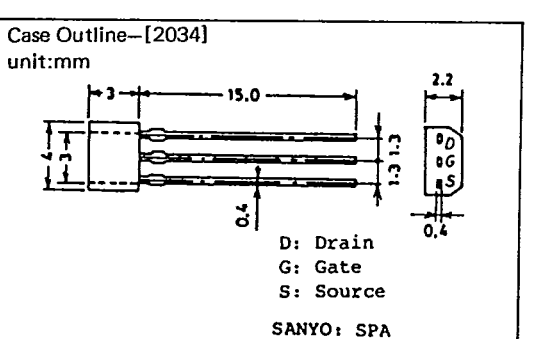
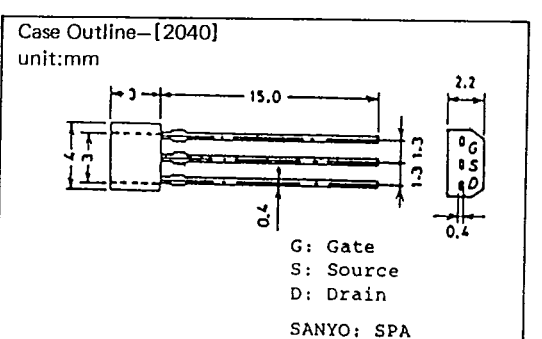
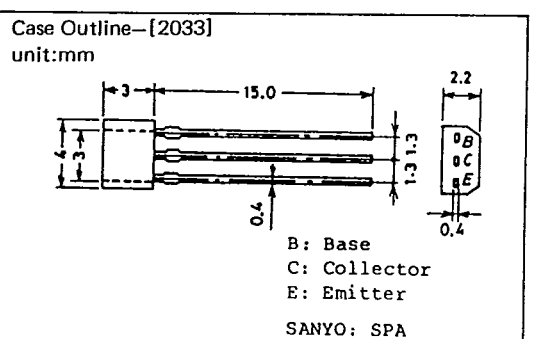
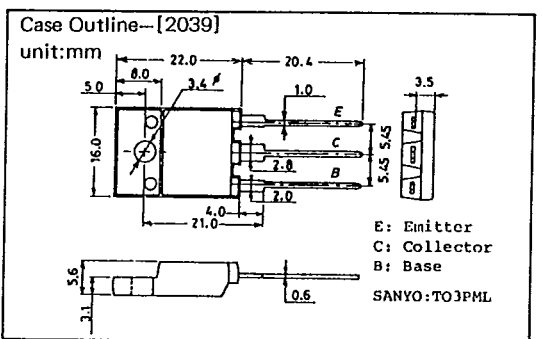
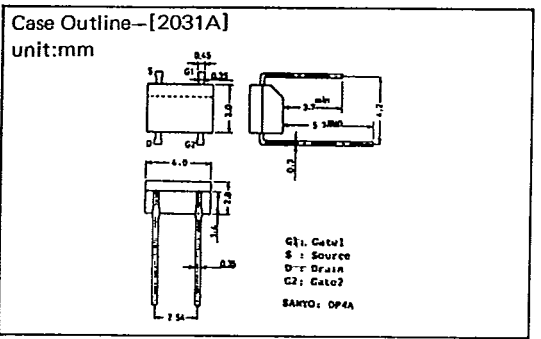
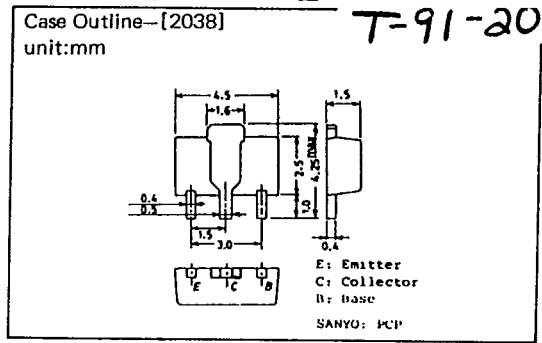
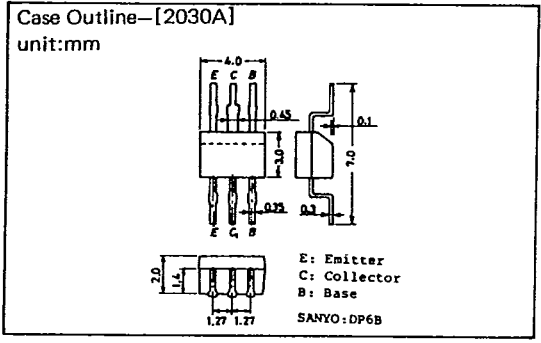


JEDEC TO-220

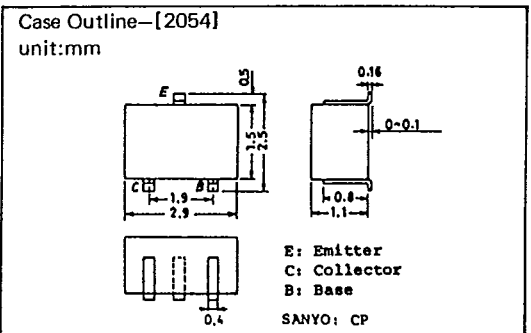
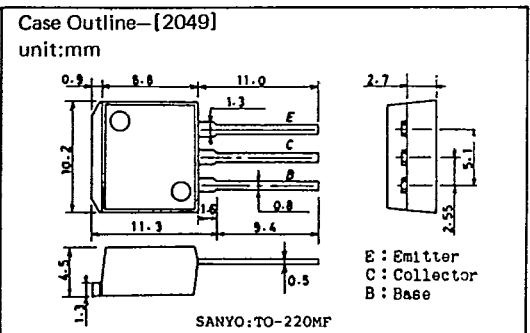
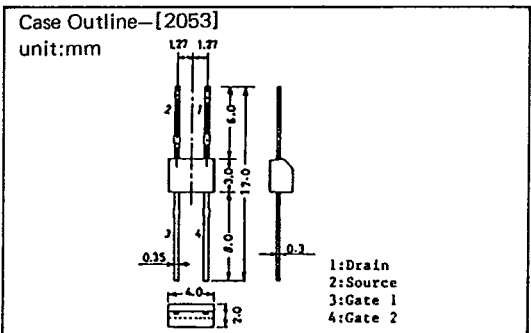
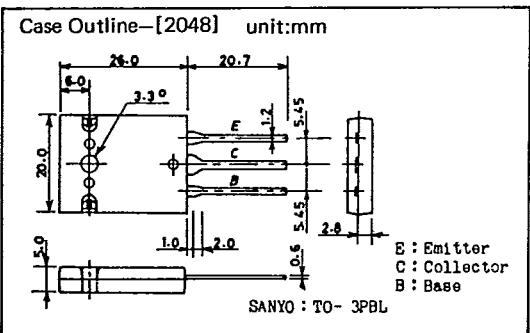
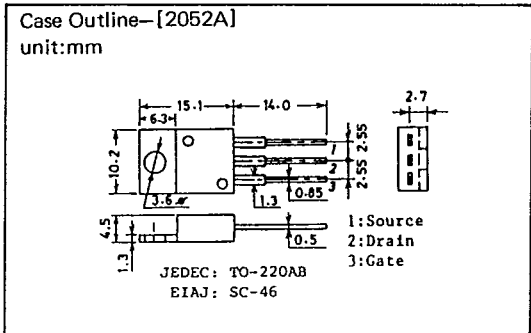
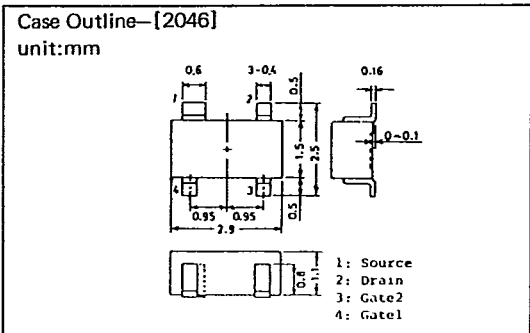
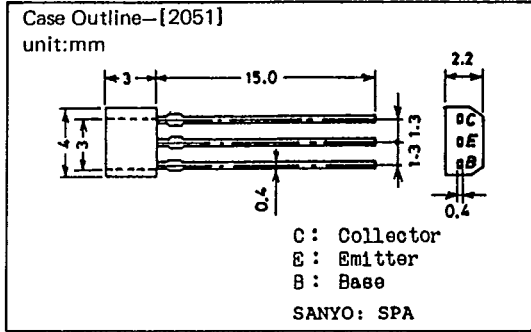
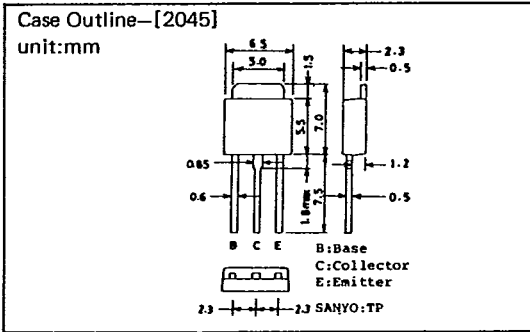
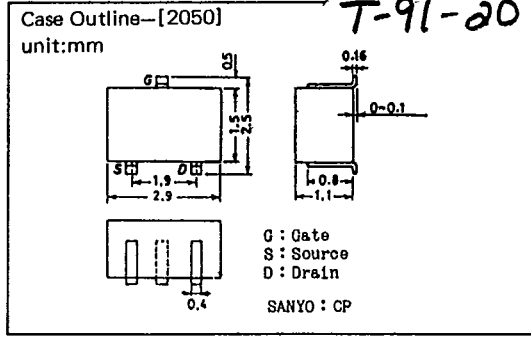
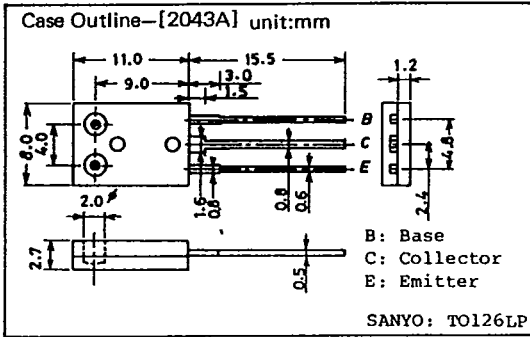
B: Base  
C: Collector  
E: Emitter



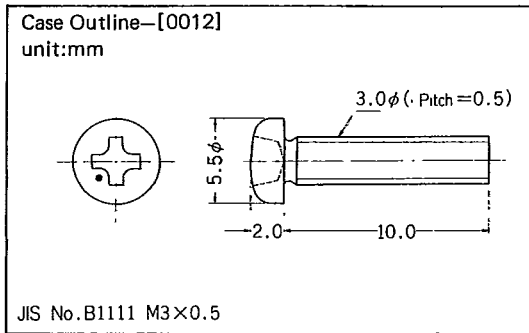
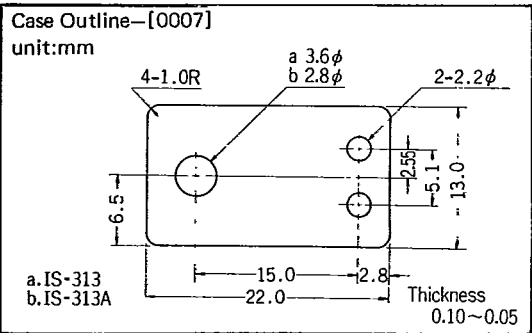
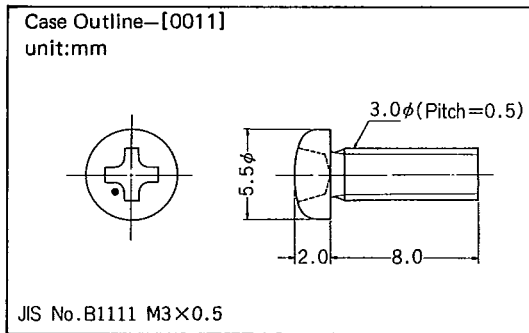
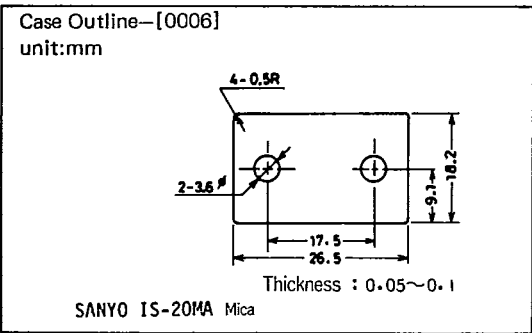
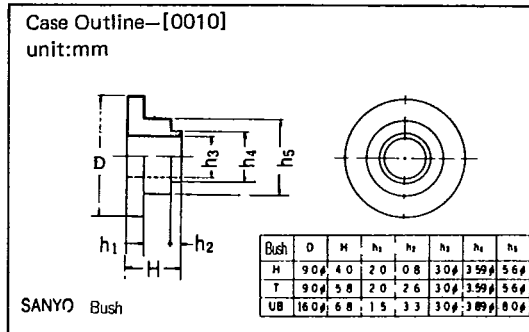
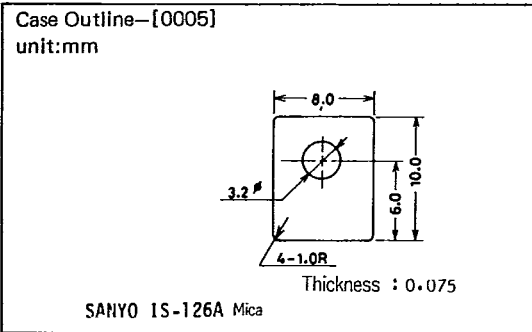
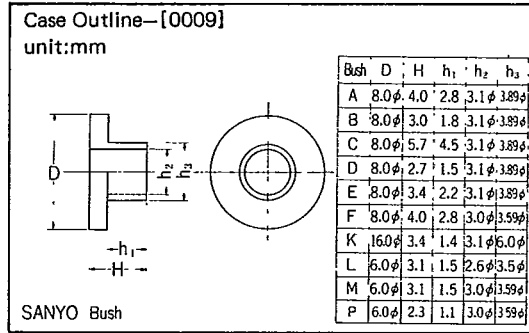
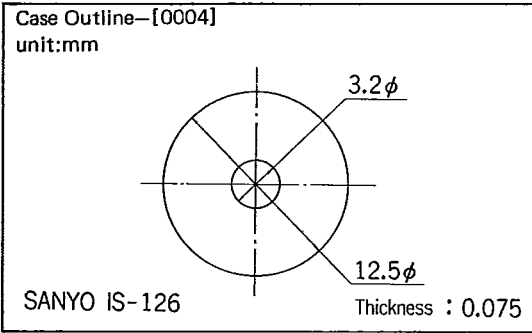
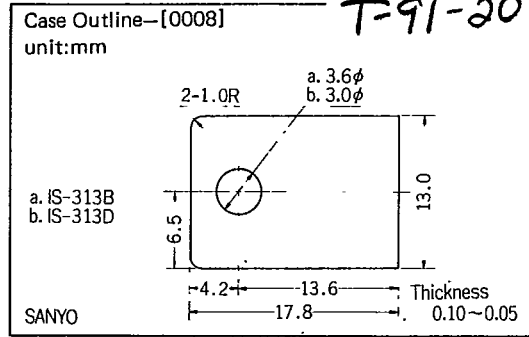
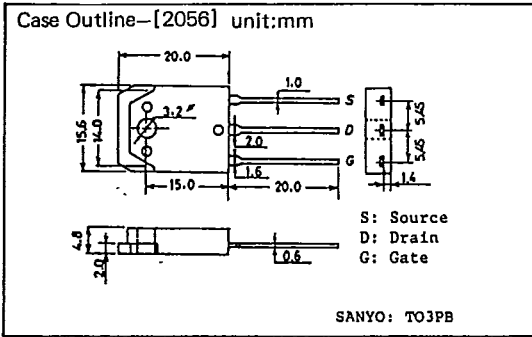
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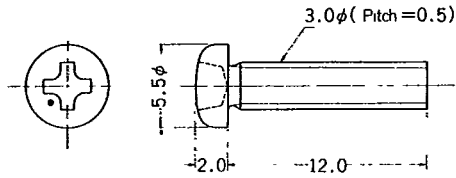
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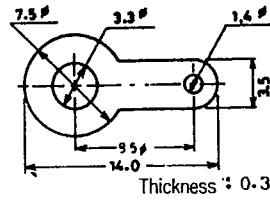


Case Outline-[0013]  
unit:mm



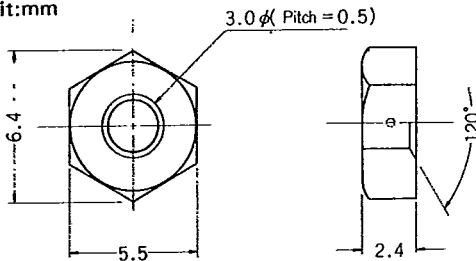
JIS No. B1111 M3×0.5

Case Outline-[0018]  
unit:mm



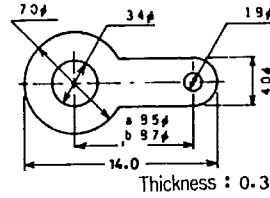
SANYO Lug 1.4

Case Outline-[0014]  
unit:mm



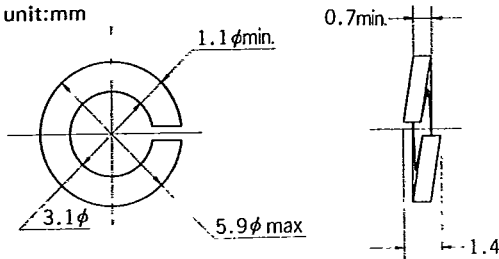
JIS No. B1181 M3×0.5

Case Outline-[0019]  
unit:mm



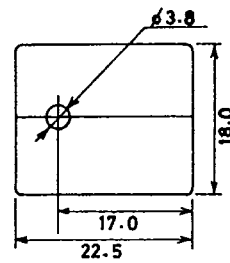
SANYO Lug 1.8φ

Case Outline-[0015]  
unit:mm



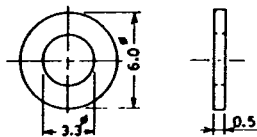
JIS No. B 1251 Spring washer (M3)

Case Outline-[0020]  
unit:mm



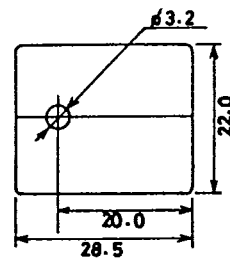
SANYO IS-3MP Mica

Case Outline-[0016]  
unit:mm



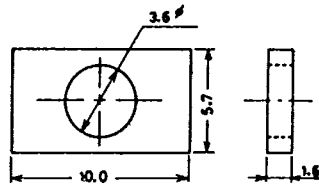
JIS No. B1252 Flat washer

Case Outline-[0021]  
unit:mm



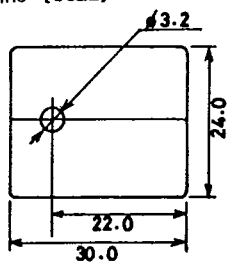
SANYO IS-MPC Mica

Case Outline-[0017]  
unit:mm



JIS No. G3141 Rectangular washer

Case Outline-[0022]  
unit:mm



SANYO IS-3PBL Mica