

SANYO

No.850D

2SK304

N-Channel Junction Silicon FET

AF Amp Applications**APPLICATIONS**

- Ideal for potentiometers, analog switches, low frequency amplifiers, and constant current supplies.

ABSOLUTE MAXIMUM RATINGS/ $T_a = 25^\circ\text{C}$

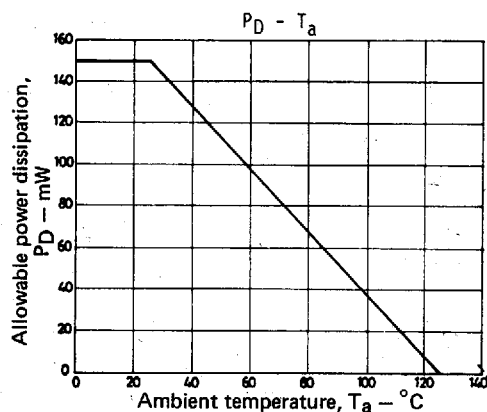
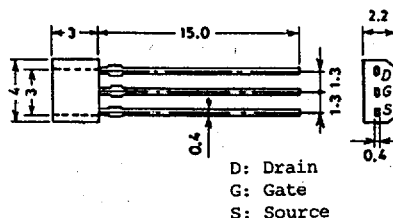
			unit
Drain-source voltage	V_{DS}	30	V
Gate-drain voltage	V_{GDS}	-30	V
Gate-current	I_G	10	mA
Drain current	I_D	20	mA
Allowable power dissipation	P_D	150	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage ambient temperature	T_{stg}	-40 to +125	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS/ $T_a = 25^\circ\text{C}$

			min	typ	max	unit
Gate-drain breakdown voltage	$V_{(BR) GDS}$	$I_G = -10 \mu\text{A}$	-30			V
Gate cut-off current	I_{GSS}	$V_{GS} = -20 \text{ V}$			-1.0	nA
Drain current	I_{DSS}	$V_{DS} = 10 \text{ V}, V_{GS} = 0$	0.6*		12.0*	mA
Cut-off voltage	$V_{GS}(\text{off})$	$V_{DS} = 10 \text{ V}, I_D = 1 \mu\text{A}$		-1	-4	V
Mutual conductance	$ y_{fs} $	$V_{DS} = 10 \text{ V}, V_{GS} = 0, f = 1 \text{ kHz}$	2.5	6.0		mS
Input capacitance	c_{iss}	$V_{DS} = 10 \text{ V}, V_{GS} = 0, f = 1 \text{ MHz}$		5		pF
Feedback capacitance	c_{rss}	$V_{DS} = 10 \text{ V}, V_{GS} = 0, f = 1 \text{ MHz}$		1.5		pF

* 2SK304 is graded as follows by I_{DSS} (unit : mA):

0.6	C	1.5	1.2	D	3.0	2.5	E	6.0	5.0	F	12.0
-----	---	-----	-----	---	-----	-----	---	-----	-----	---	------

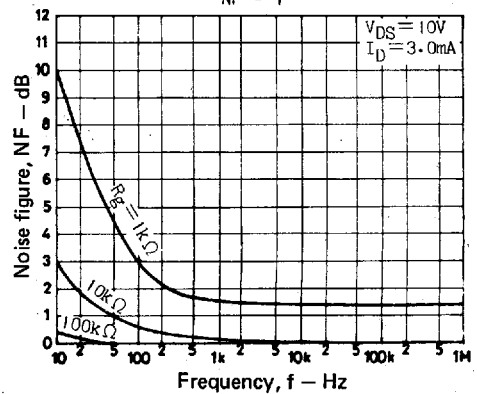
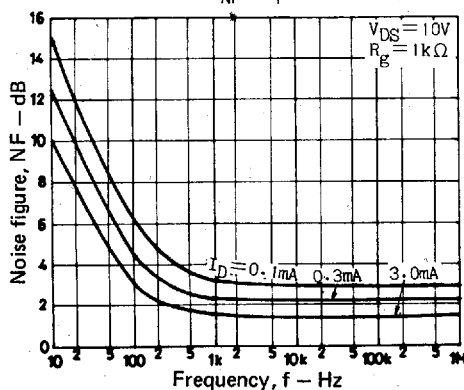
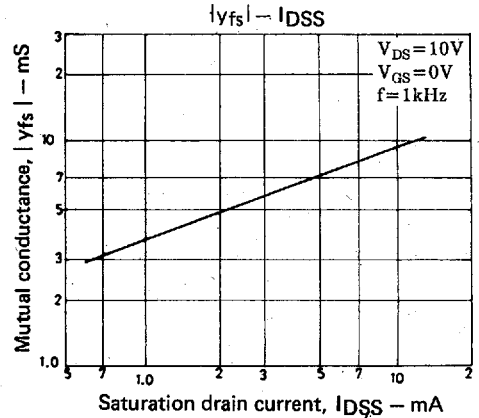
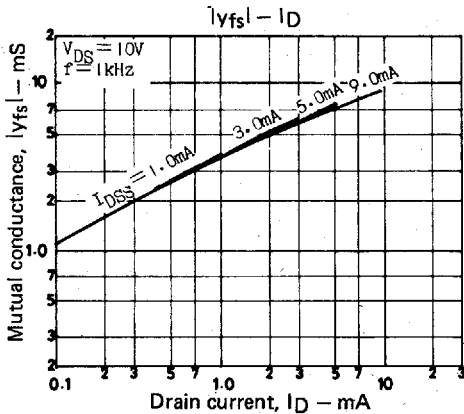
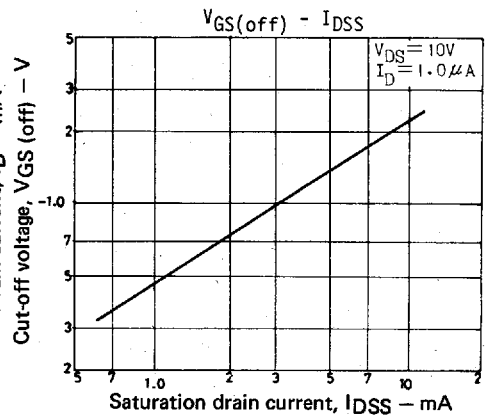
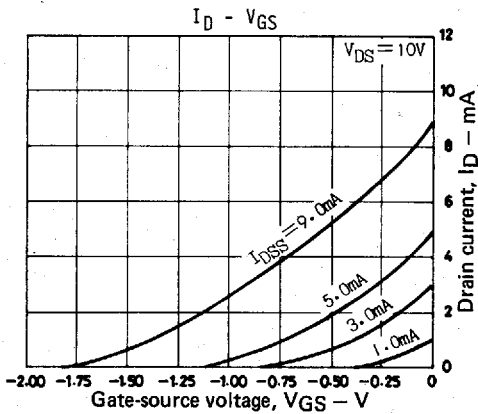
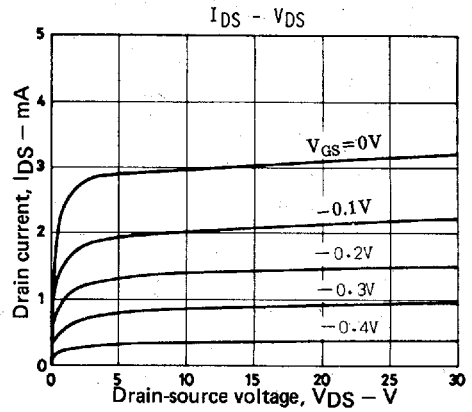
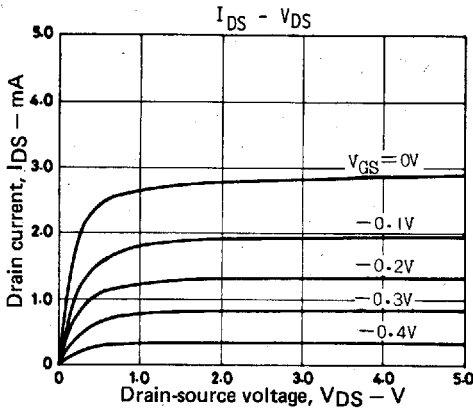
Case Outline 2034
(unit:mm)

SANYO: SPA

Specifications and information herein are subject to change without notice.

SANYO Electric Co., Ltd. Semiconductor Business Headquarters

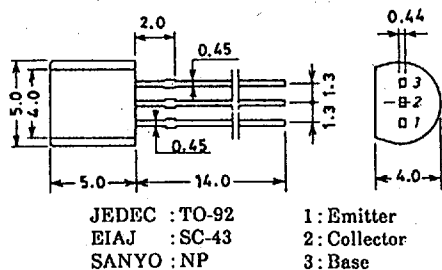
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN



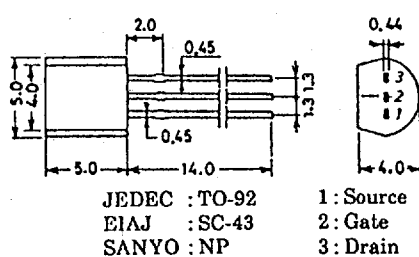
CASE OUTLINES OF LEAD FORMED SMALL SIGNAL TRANSISTORS

- All of Sanyo lead formed small signal 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.

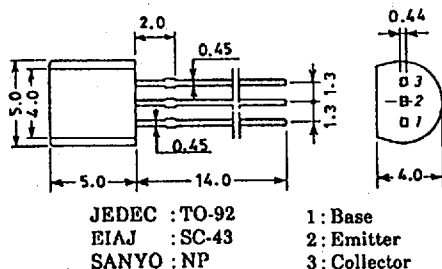
Case Outline 2003A/2003B (unit : mm)



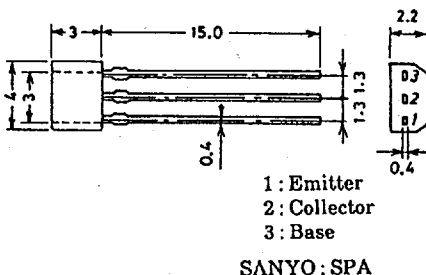
Case Outline 2019A/2019B (unit : mm)



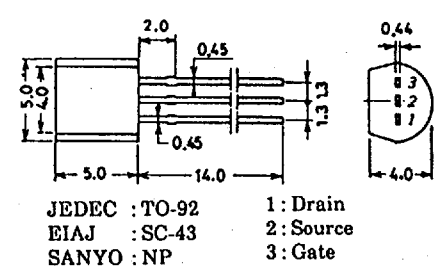
Case Outline 2004A (unit : mm)



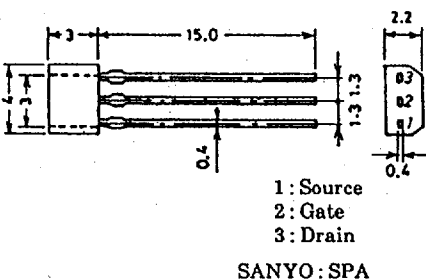
Case Outline 2033 (unit : mm)



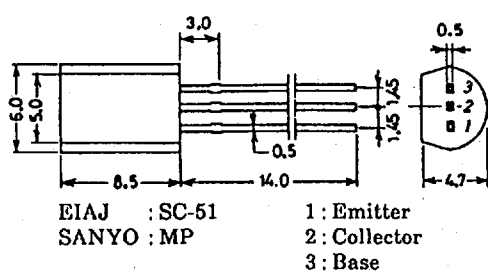
Case Outline 2005A (unit : mm)



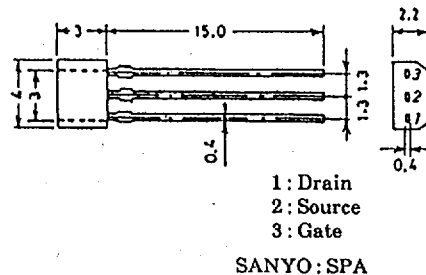
Case Outline 2034/2034A (unit : mm)



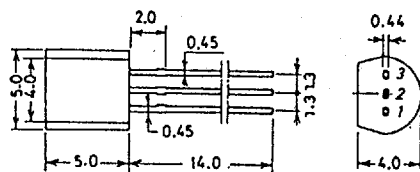
Case Outline 2006A (unit : mm)



Case Outline 2040 (unit : mm)



Case Outline 2061 (unit : mm)



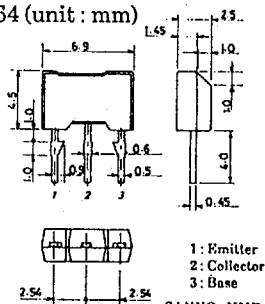
JEDEC : TO-92

EIAJ : SC-43

SANYO : NP

- 1: Emitter
- 2: Base
- 3: Collector

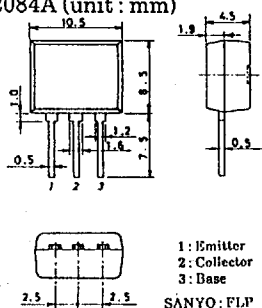
Case Outline 2064 (unit : mm)



- 1: Emitter
- 2: Collector
- 3: Base

SANYO : NMP

Case Outline 2084A (unit : mm)



- 1: Emitter
- 2: Collector
- 3: Base

SANYO : FLIP