

No.1404A

2SK427

N-Channel Junction Silicon FET

AM Tuner, RF Amp Applications

Use

- AM tuner RF amp, low-noise amp

Features

- Large $|y_{fs}|$
- Very low noise figure
- Small c_{rss}

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

			unit
Drain to source voltage	V_{DSS}	15	V
Gate to drain voltage	V_{GDS}	-15	V
Gate current	I_G	10	mA
Drain current	I_D	20	mA
Power dissipation	PD	200	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

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

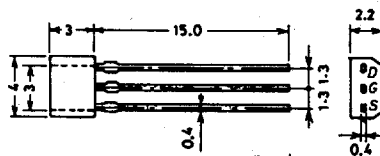
			min	typ	max	unit
Gate to drain breakdown voltage	$V_{(BR)GDS}$	$I_G = -10\mu\text{A}, V_{DS} = 0\text{V}$	-15			V
Common source gate cutoff current	I_{GSS}	$V_{GS} = -10\text{V}, V_{DS} = 0\text{V}$			-1.0	nA
Gate to source cutoff voltage	$V_{GS(off)}$	$V_{DS} = 5\text{V}, I_D = 100\mu\text{A}$		-0.5	-1.5	V
Drain current (gate-source shorted)	I_{DSS}	$V_{DS} = 5\text{V}, V_{GS} = 0\text{V}$	1.2*		12.0*	mA
Forward transfer admittance	$ y_{fs} $	$V_{DS} = 5\text{V}, V_{GS} = 0\text{V}, f = 1\text{kHz}$	8.0	17		mS
Input capacitance	c_{iss}	$V_{DS} = 5\text{V}, V_{GS} = 0\text{V}, f = 1\text{MHz}$		7.0		pF
Feedback capacitance	c_{rss}	$V_{DS} = 5\text{V}, V_{GS} = 0\text{V}, f = 1\text{MHz}$		2.0		pF
Noise figure	NF	$V_{DS} = 5\text{V}, I_o = 1\text{mA}$ $R_g = 1\text{k}\Omega, f = 1\text{kHz}$		1.5		dB

*:The 2SK427 is classified by I_{DSS} as follows (unit: mA):

1.2	P	2.1	1.7	Q	3.0	2.5	R	4.2
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3.5	S	6.0	5.0	T	8.5	7.3	U	12.0
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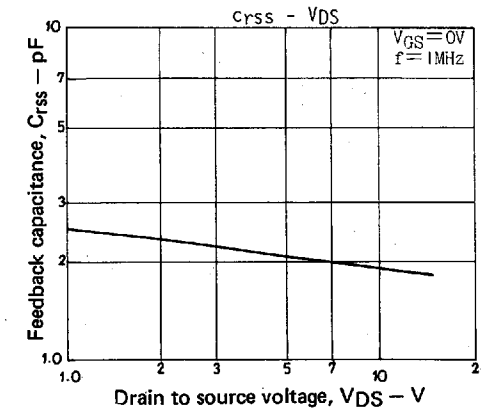
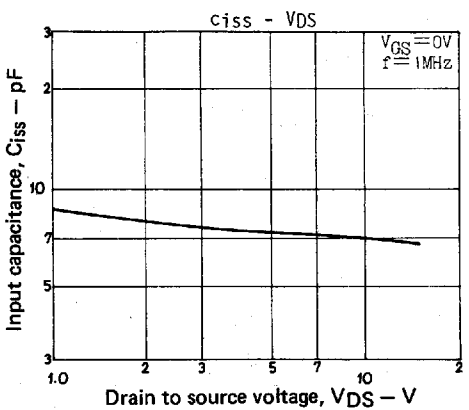
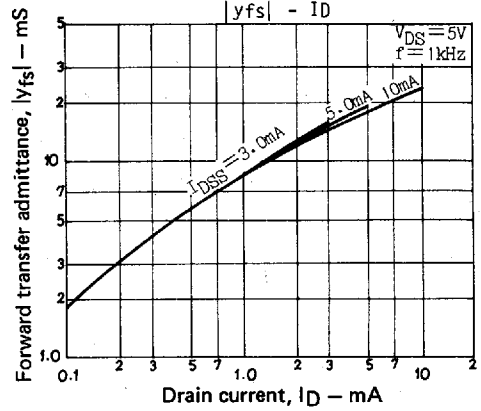
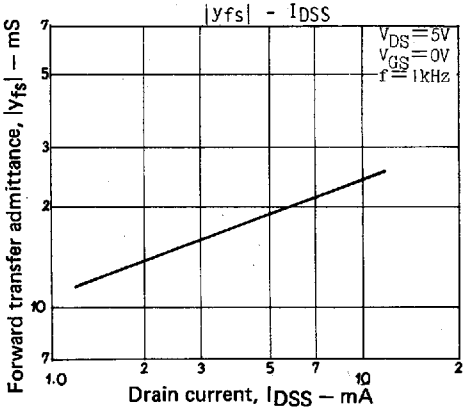
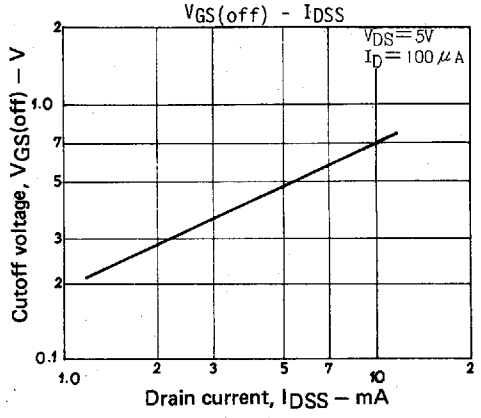
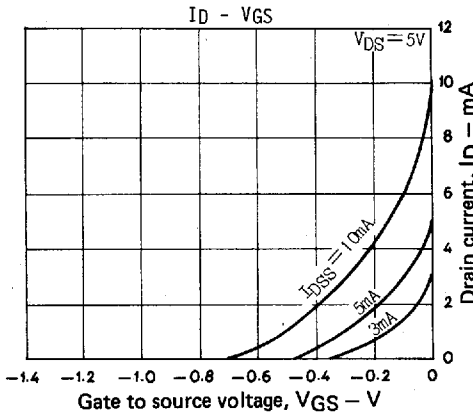
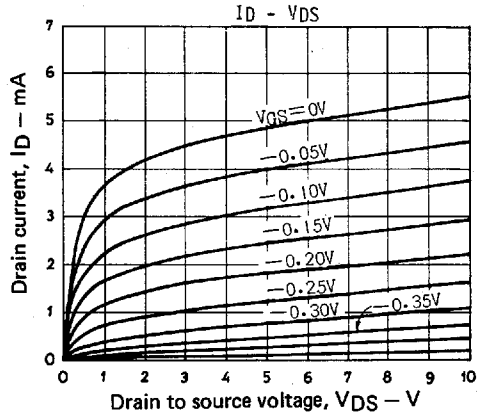
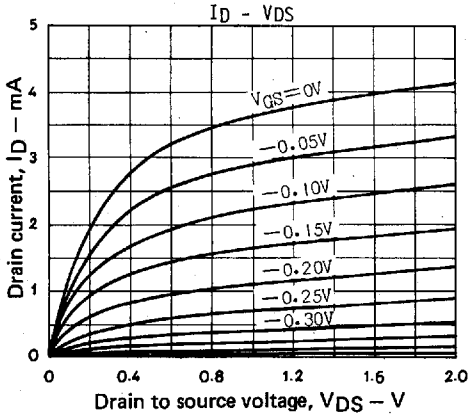
Case Outline 2034
(unit: mm)

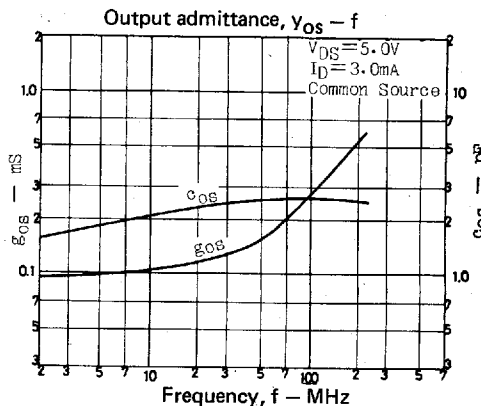
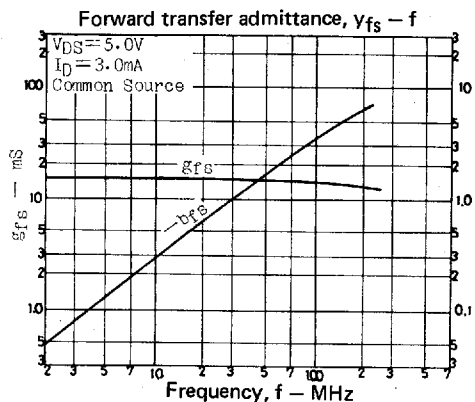
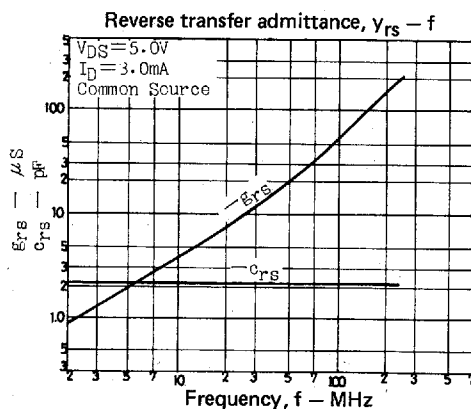
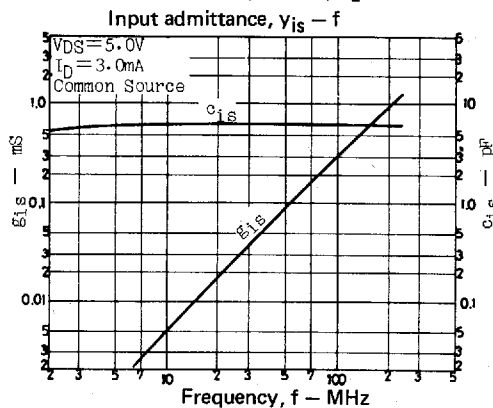
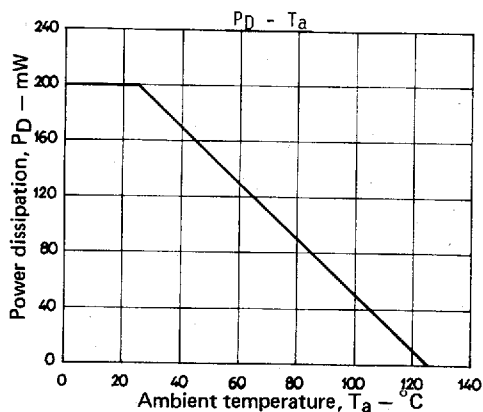
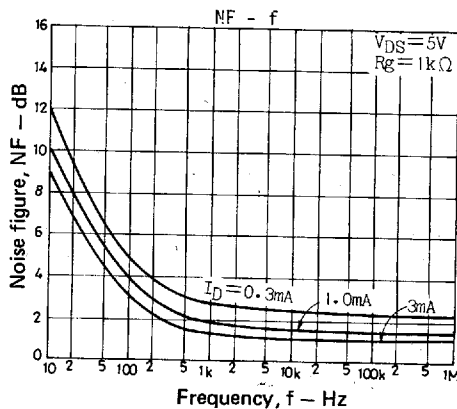
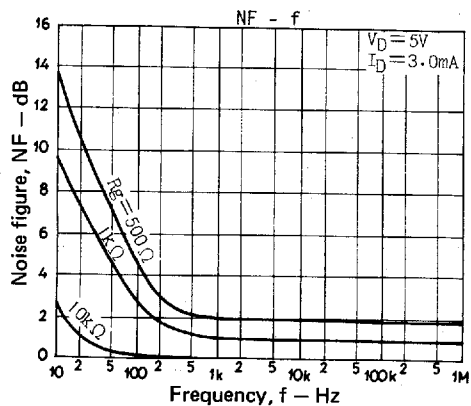


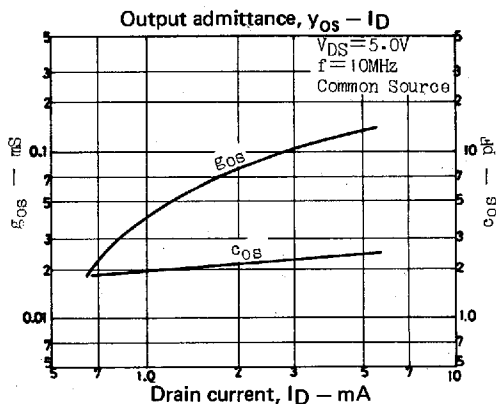
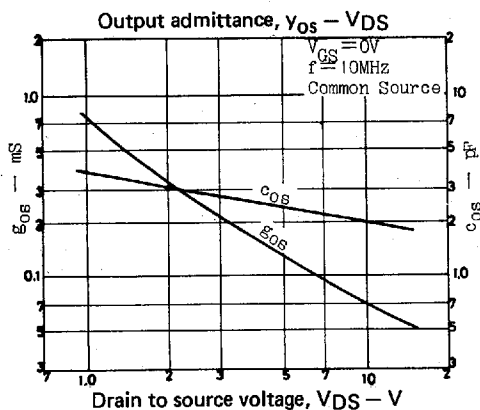
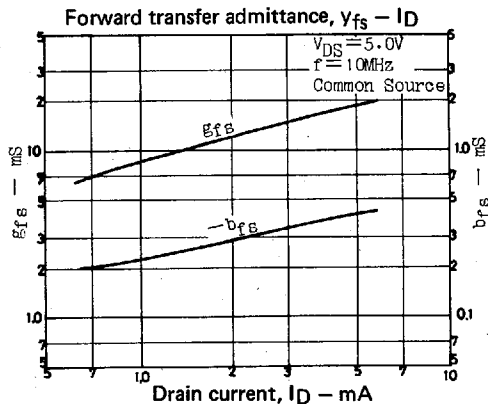
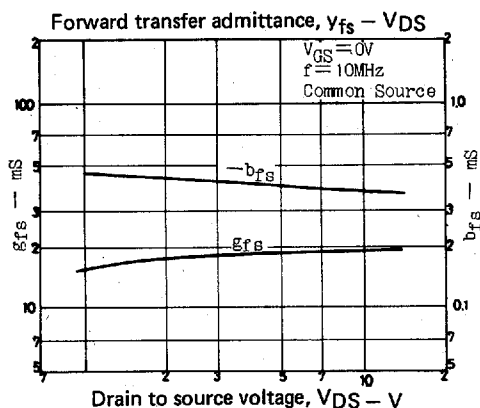
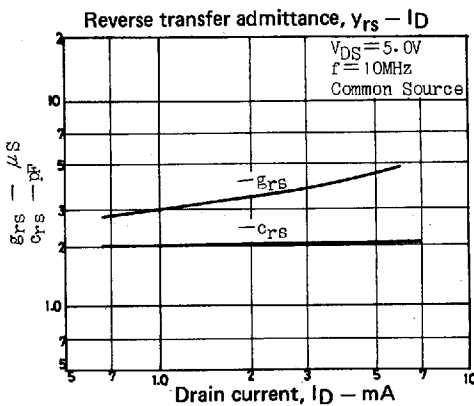
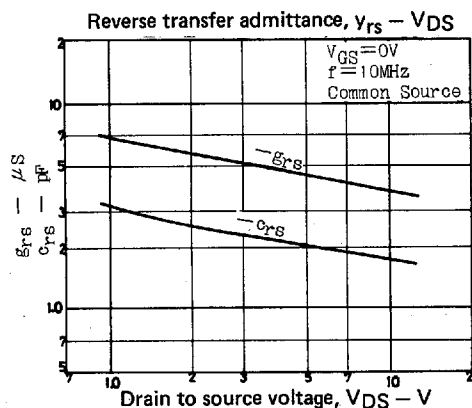
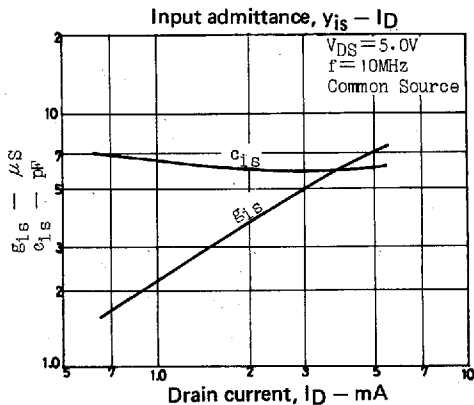
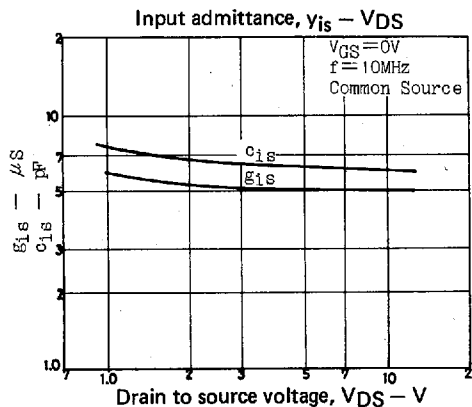
D: Drain
G: Gate
S: Source
SANYO: SPA

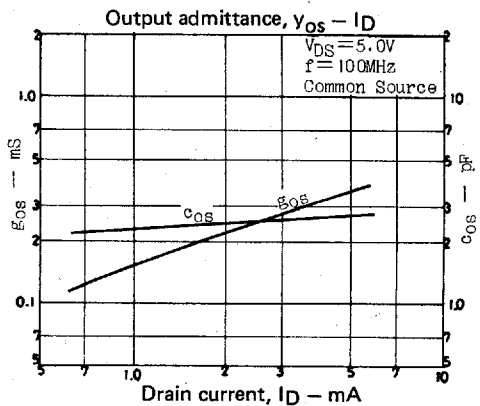
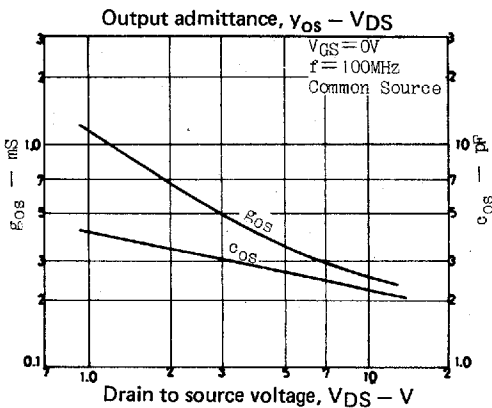
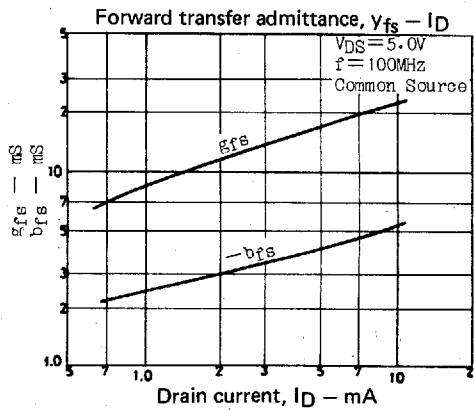
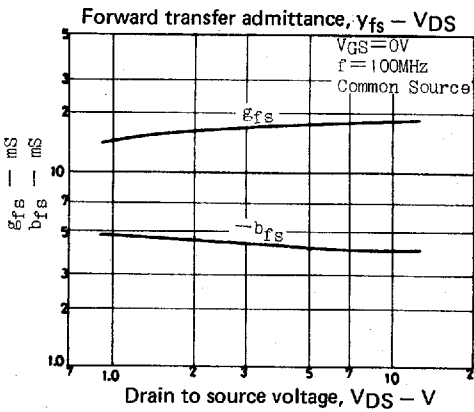
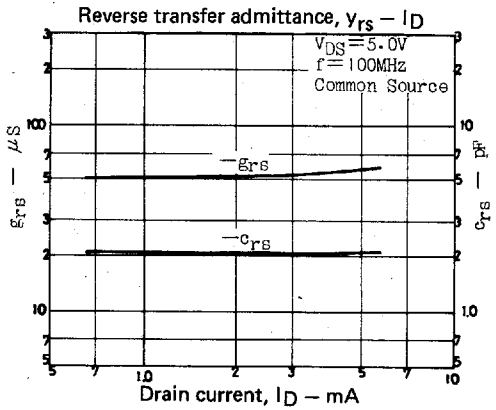
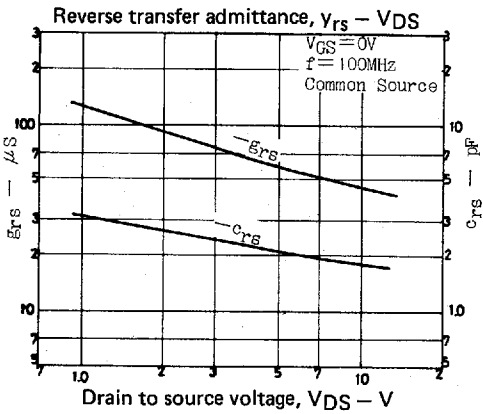
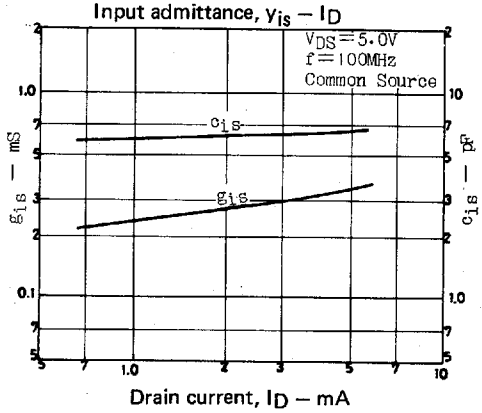
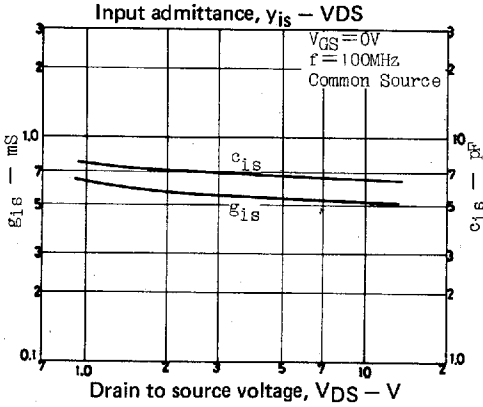
Specifications and information herein are subject to change without notice.

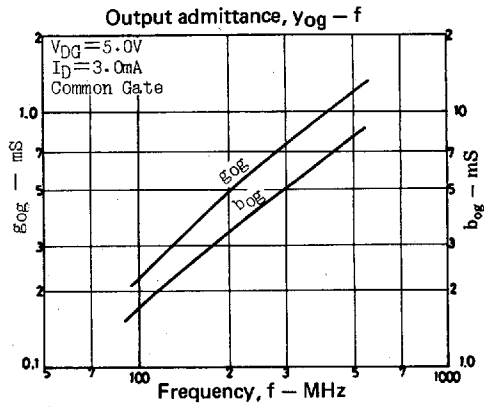
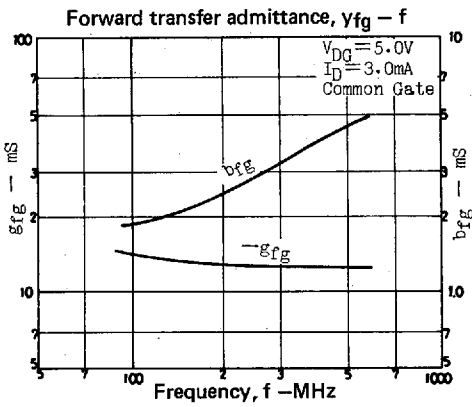
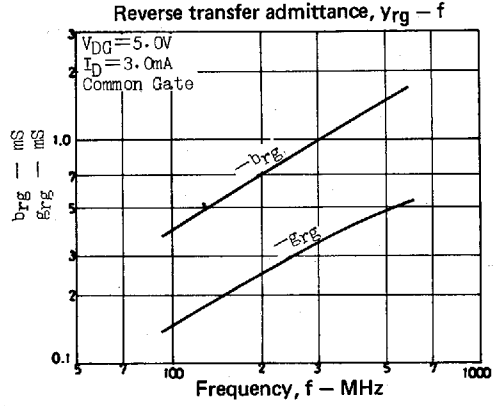
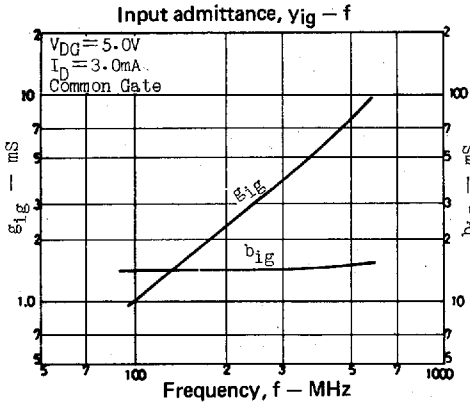
SANYO Electric Co., Ltd. Semiconductor Business Headquarters
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN







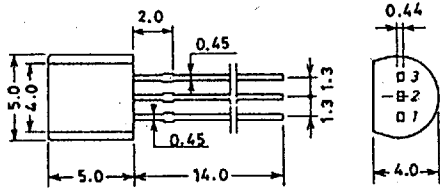




CASE OUTLINES OF LEAD FORMED SMALL SIGNAL TRANSISTORS

- 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.

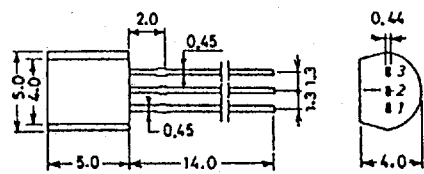
Case Outline 2003A/2003B (unit : mm)



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

1 : Emitter
2 : Collector
3 : Base

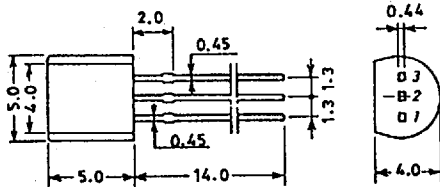
Case Outline 2019A/2019B (unit : mm)



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

1 : Source
2 : Gate
3 : Drain

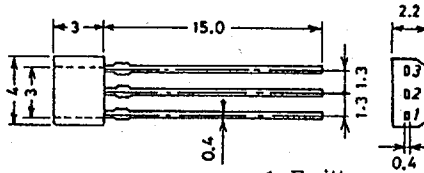
Case Outline 2004A (unit : mm)



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

1 : Base
2 : Emitter
3 : Collector

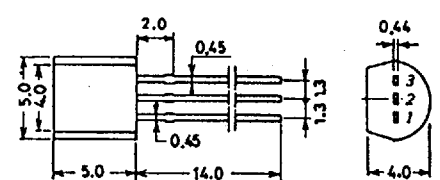
Case Outline 2033 (unit : mm)



1 : Emitter
2 : Collector
3 : Base

SANYO : SPA

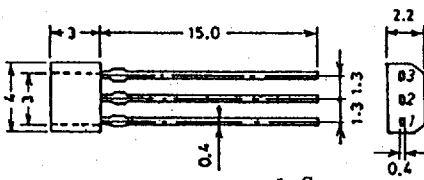
Case Outline 2005A (unit : mm)



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

1 : Drain
2 : Source
3 : Gate

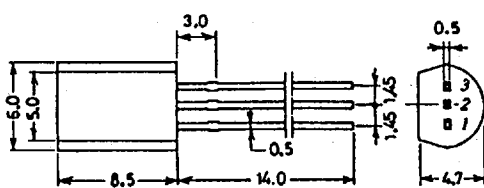
Case Outline 2034/2034A (unit : mm)



1 : Source
2 : Gate
3 : Drain

SANYO : SPA

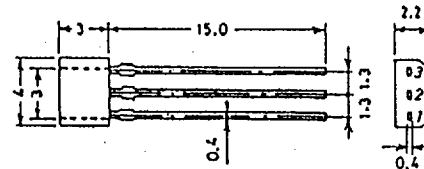
Case Outline 2006A (unit : mm)



EIAJ : SC-51
SANYO : MP

1 : Emitter
2 : Collector
3 : Base

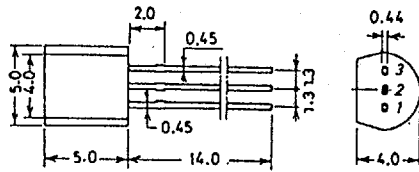
Case Outline 2040 (unit : mm)



1 : Drain
2 : Source
3 : Gate

SANYO : SPA

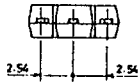
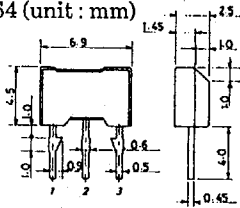
Case Outline 2061 (unit : mm)



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

1 : Emitter
2 : Base
3 : Collector

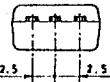
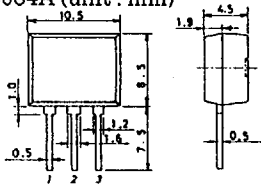
Case Outline 2064 (unit : mm)



1 : Emitter
2 : Collector
3 : Base

SANYO : NMP

Case Outline 2084A (unit : mm)



1 : Emitter
2 : Collector
3 : Base

SANYO : FLP