

SANYO

No.1439A

2SK445

N-Channel Junction Silicon FET

Video Camera Applications

Features

- Large $|y_{fs}|$
- Small c_{iss}
- Very low noise figure
- High frequency, audio frequency, low noise amp

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

Drain to source voltage	V_{DS}	15	unit
Gate to drain voltage	V_{GDS}	-15	V
Gate current	I_G	10	mA
Drain current	I_D	50	mA
Power dissipation	P_D	300	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

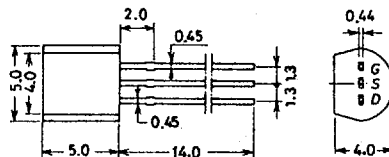
Electrical Characteristics/ $T_a = 25^\circ\text{C}$

			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	$V_{GS(off)}$	$V_{DS} = 5\text{V}, I_D = 100\mu\text{A}$		-0.9	-2.0	V
Drain current (gate-source shorted)	I_{DSS}	$V_{DS} = 5\text{V}, V_{GS} = 0\text{V}$	5.0*		38.0*	mA
Forward transfer admittance	$ y_{fs} $	$V_{DS} = 5\text{V}, V_{GS} = 0\text{V}, f = 1\text{kHz}$	20	30		mS
Input capacitance	c_{iss}	$V_{DS} = 5\text{V}, V_{GS} = 0\text{V}, f = 1\text{MHz}$		9.0		pF
Feedback capacitance	c_{rss}	$V_{DS} = 5\text{V}, V_{GS} = 0\text{V}, f = 1\text{MHz}$		2.8		pF
Noise figure	NF	$V_{DS} = 5\text{V}, R_g = 1\text{k}\Omega, I_D = 1\text{mA}, f = 1\text{kHz}$		1.5		dB

*:The 2SK445 is classified by $V_{DS} = 5\text{V}$ as follows (unit : mA):

5.0	F	12.0	10.0	G	24.0	16.0	H	38.0
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Case Outline 2005A
(unit:mm)



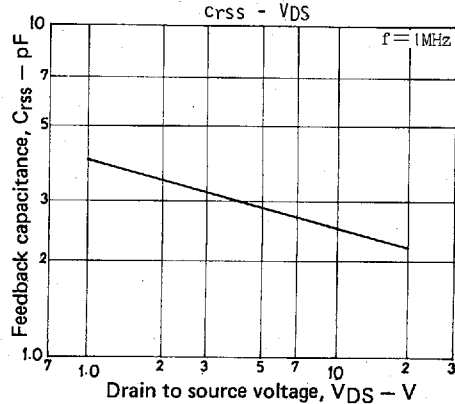
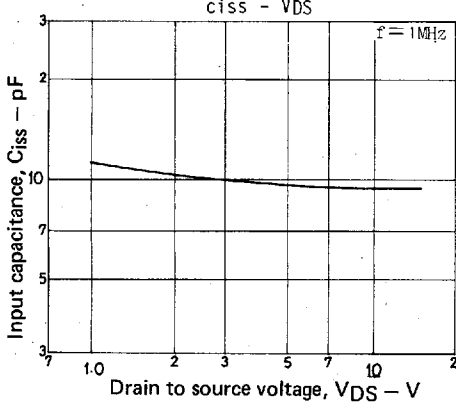
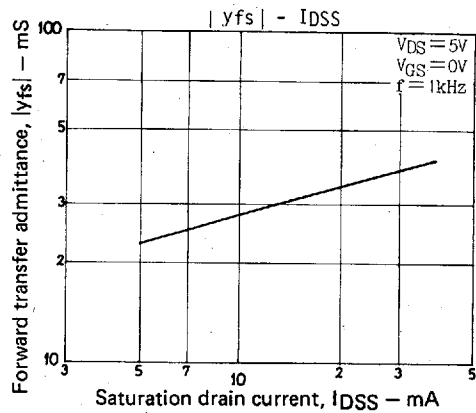
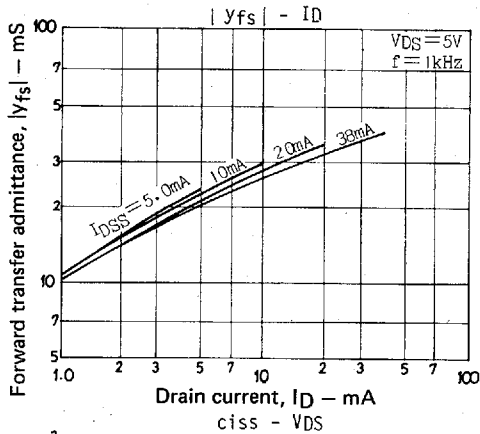
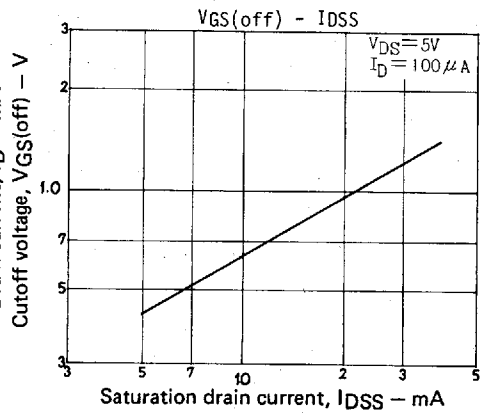
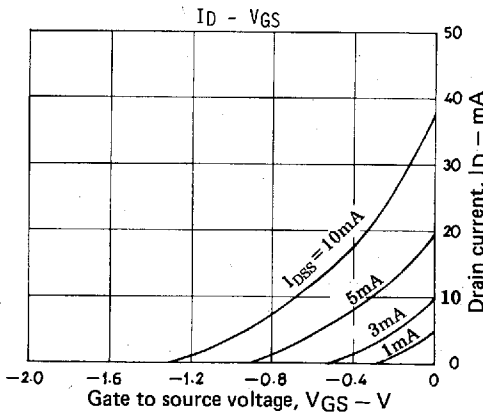
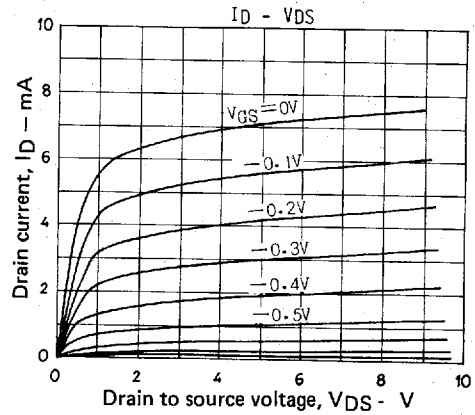
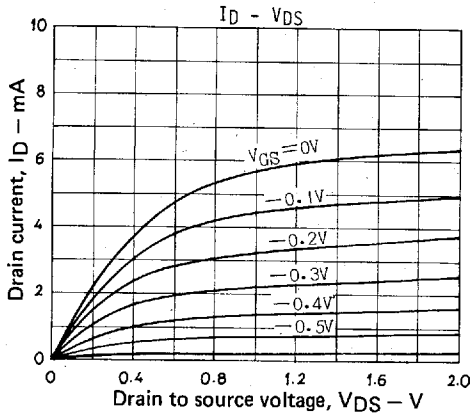
JEDEC: TO-92
EIAJ : SC-43
SANYO: NP

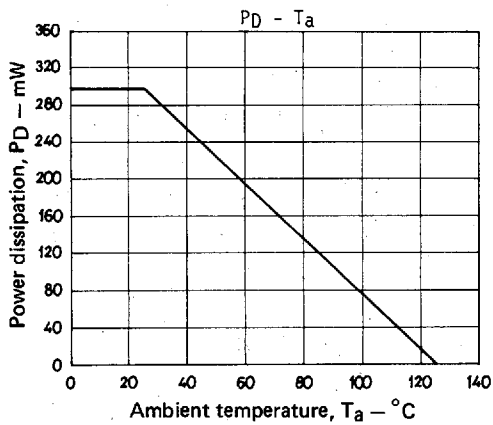
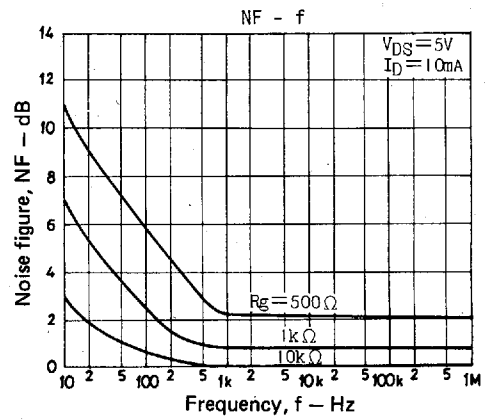
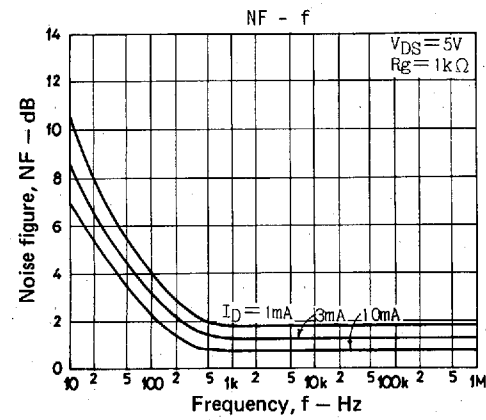
G: Gate
S: Source
D: Drain

Specifications and information herein are subject to change without notice.

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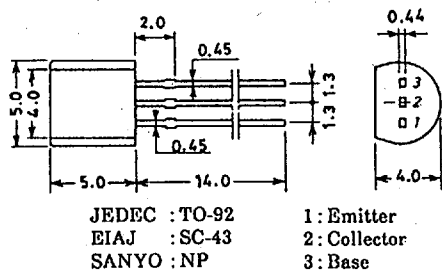




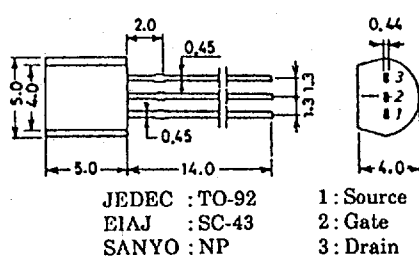
CASE OUTLINES OF LEAD FORMED SMALL SIGNAL TRANSISTORS

- 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.

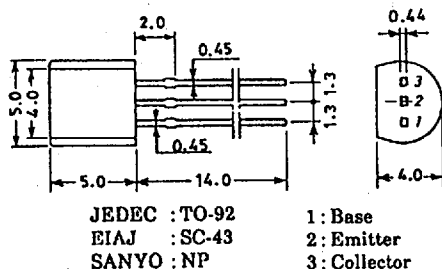
Case Outline 2003A/2003B (unit : mm)



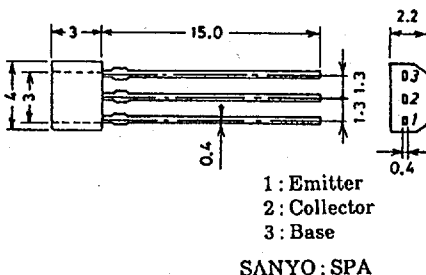
Case Outline 2019A/2019B (unit : mm)



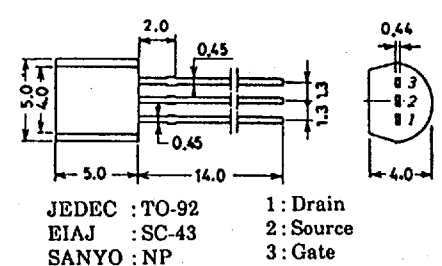
Case Outline 2004A (unit : mm)



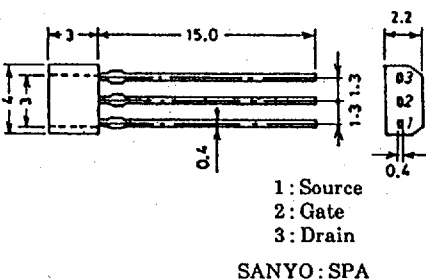
Case Outline 2033 (unit : mm)



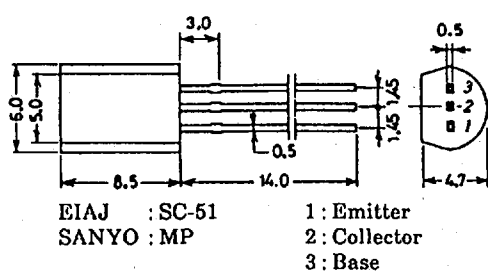
Case Outline 2005A (unit : mm)



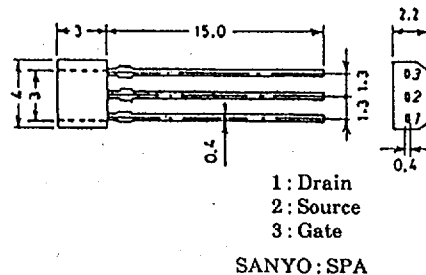
Case Outline 2034/2034A (unit : mm)



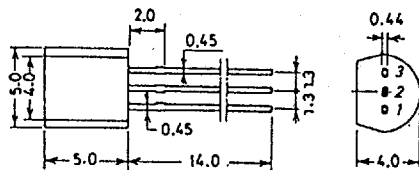
Case Outline 2006A (unit : mm)



Case Outline 2040 (unit : mm)



Case Outline 2061 (unit : mm)



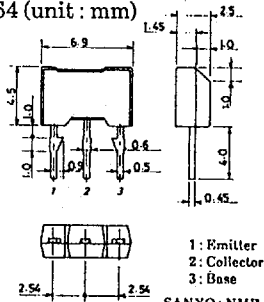
JEDEC : TO-92

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SANYO : NP

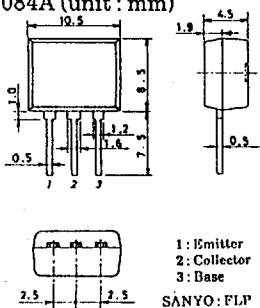
- 1: Emitter
- 2: Base
- 3: Collector

Case Outline 2064 (unit : mm)



SANYO : NMP

Case Outline 2084A (unit : mm)



SANYO : FLIP