

2SK436

T-31-25



2050

N-Channel Junction Silicon FET

High-Frequency, Low-Frequency General-Purpose Amp Applications

©1405A

Use

- AM tuner RF amp, low-noise amp

Features

- Large $|y_{fs}|$
- Very low noise figure
- Small c_{rss}
- Very small-sized package permitting sets to be small-sized, slim

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	P_D	150	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 ~ +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	$V_{DS} = 5\text{V}, I_D = 1\text{mA}, R_g = 1\text{k}\Omega, f = 1\text{kHz}$		1.5		dB

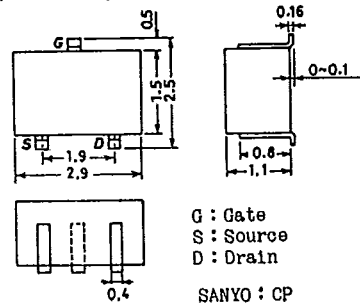
*:The 2SK436 is classified by I_{DSS} as follows (unit: mA) :

1.2	17	2.1	1.7	18	3.0	2.5	19	4.2
3.5	20	6.0	5.0	21	8.5	7.3	22	12.0

(Note) Marking : A

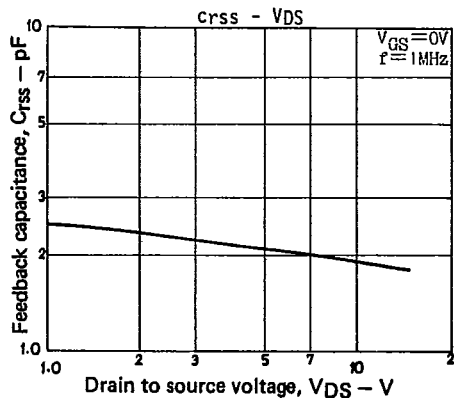
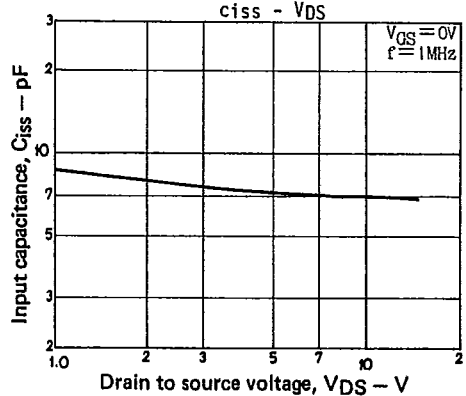
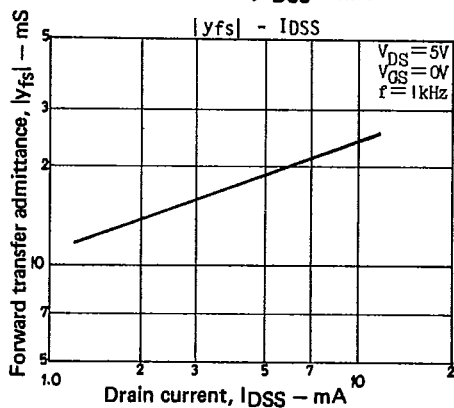
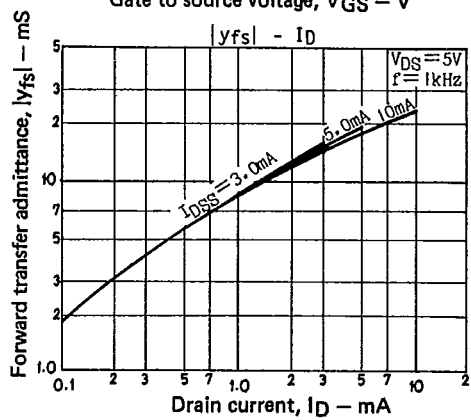
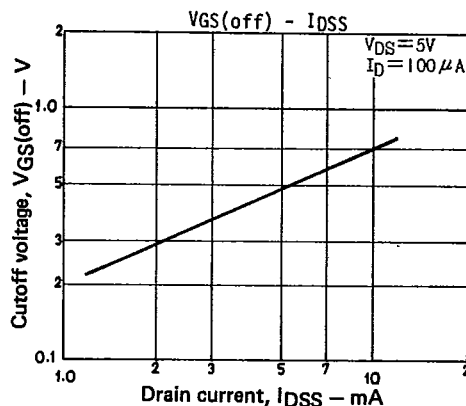
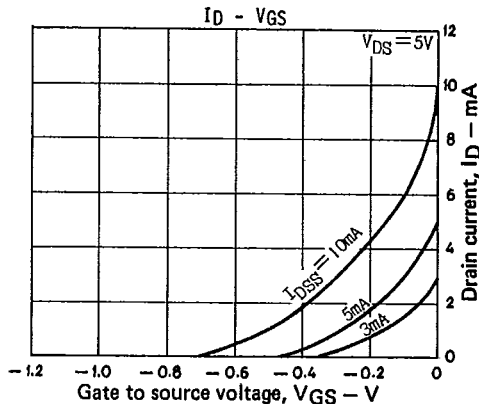
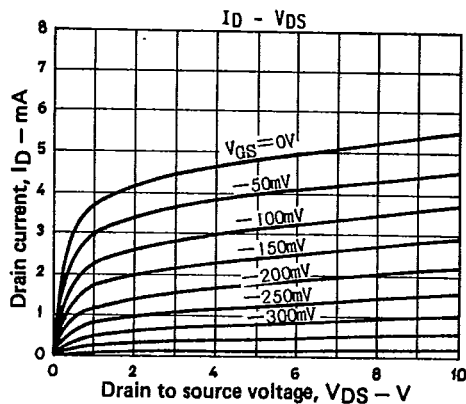
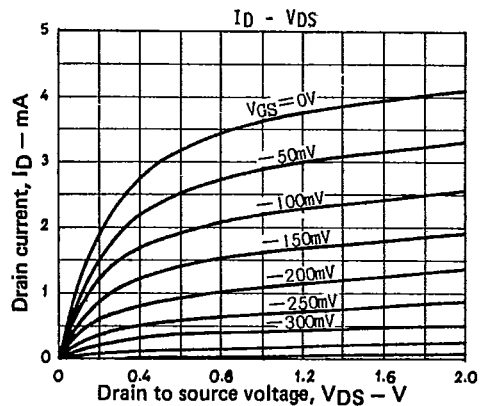
I_{DSS} rank : 17, 18, 19, 20, 21, 22

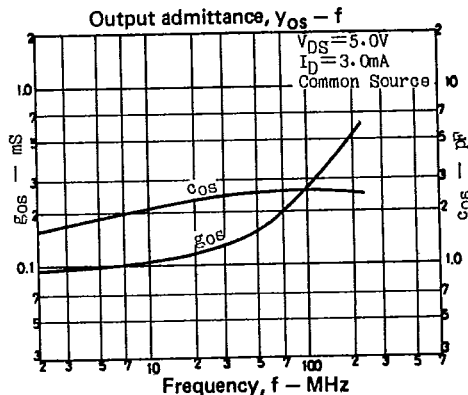
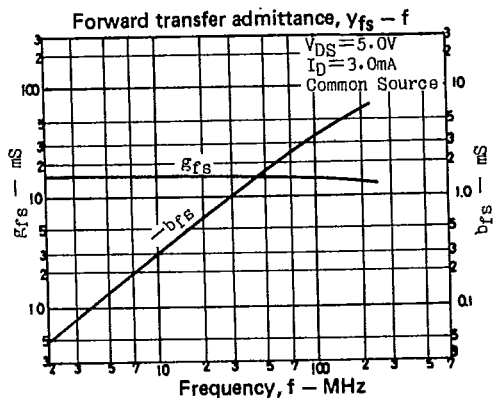
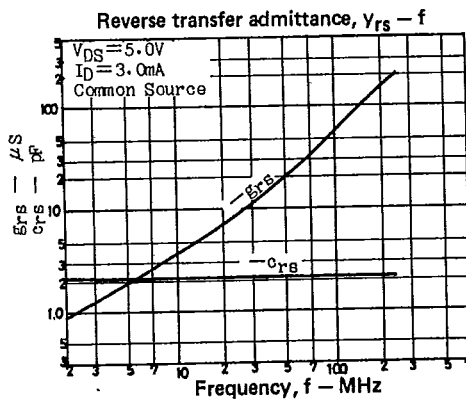
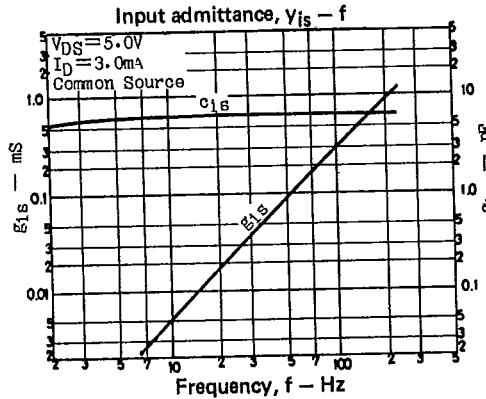
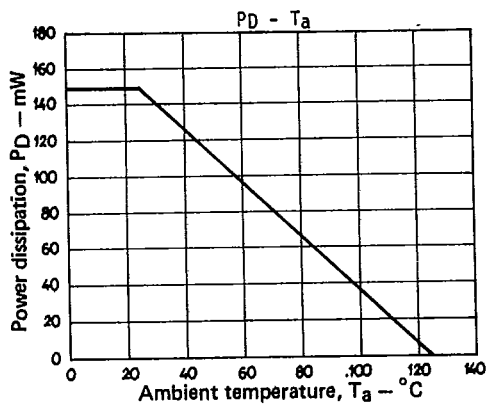
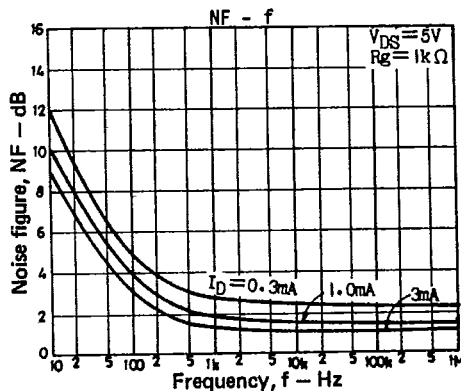
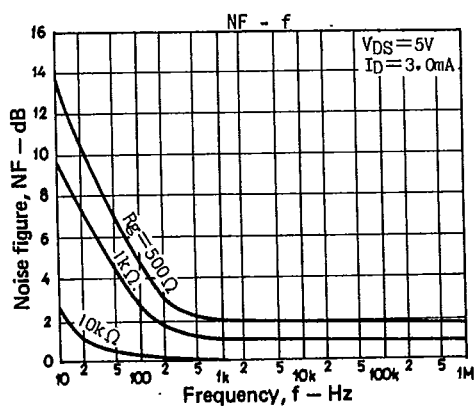
Case Outline 2050
(unit : mm)

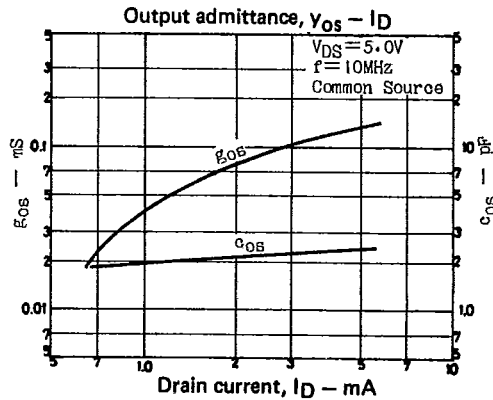
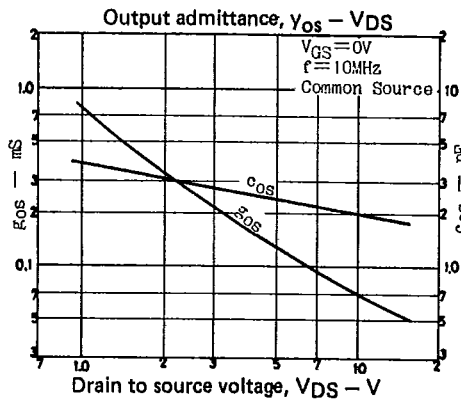
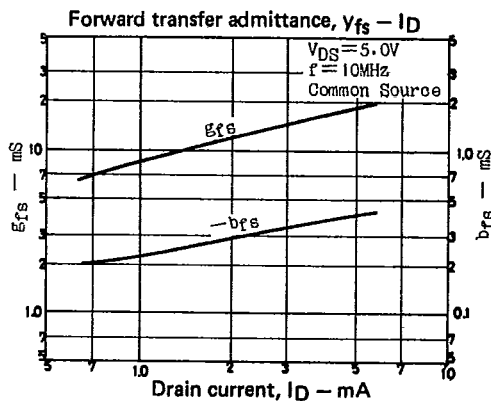
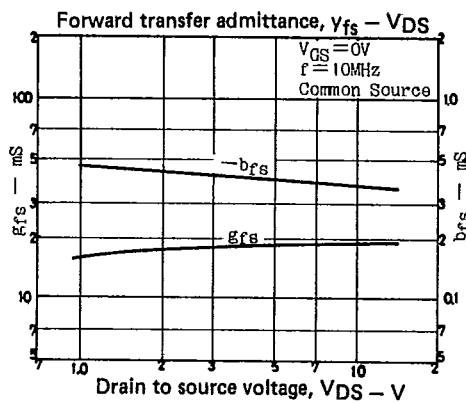
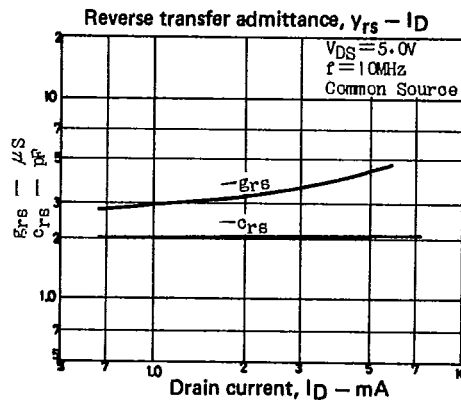
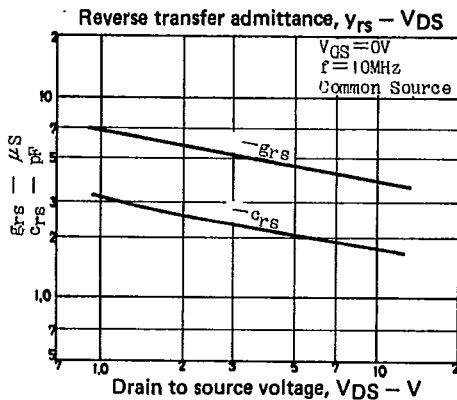
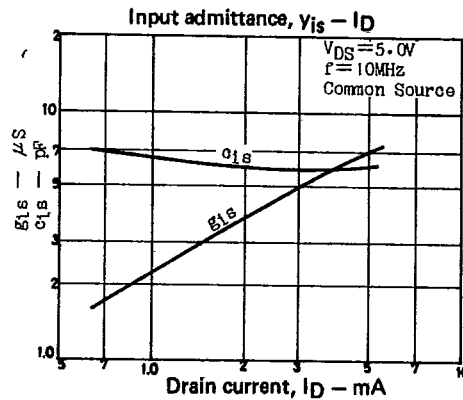
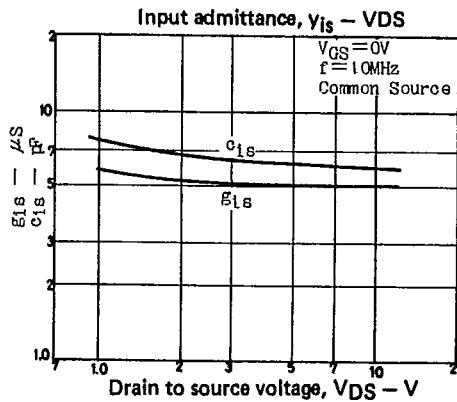


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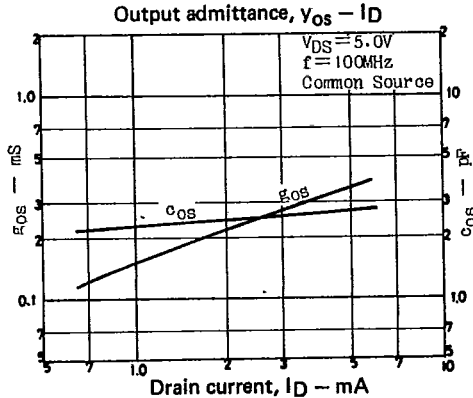
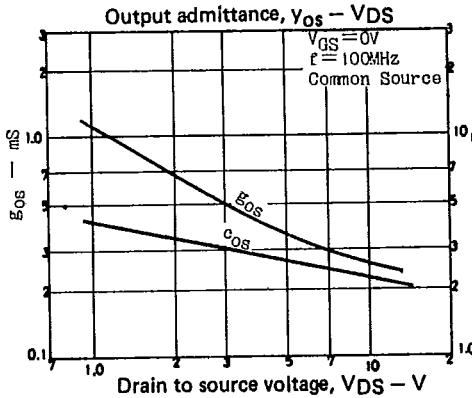
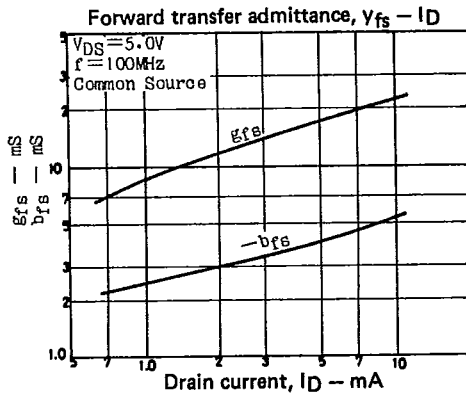
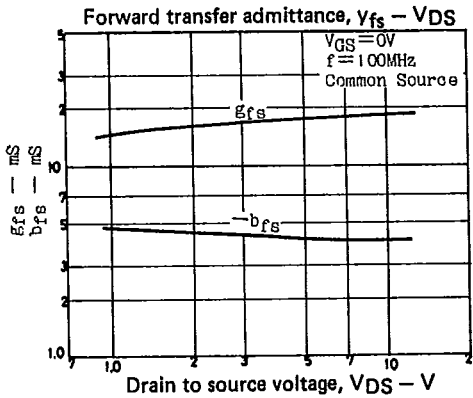
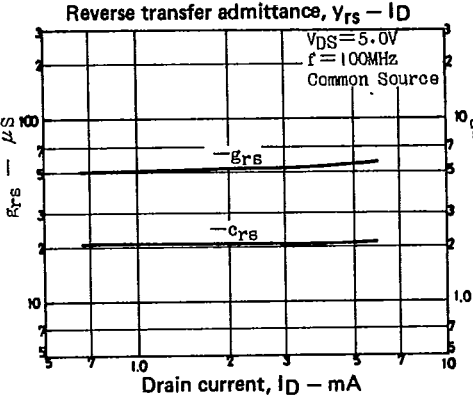
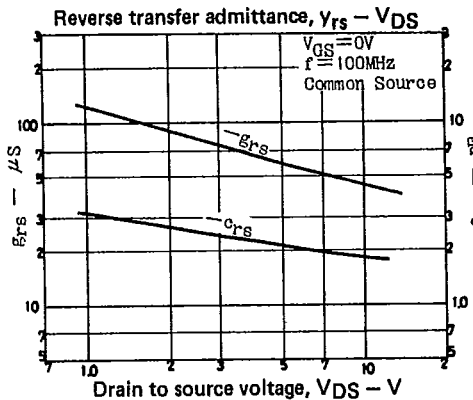
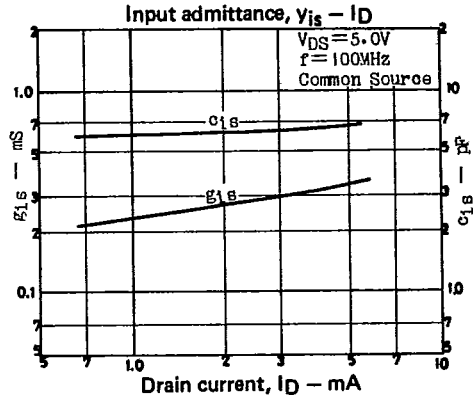
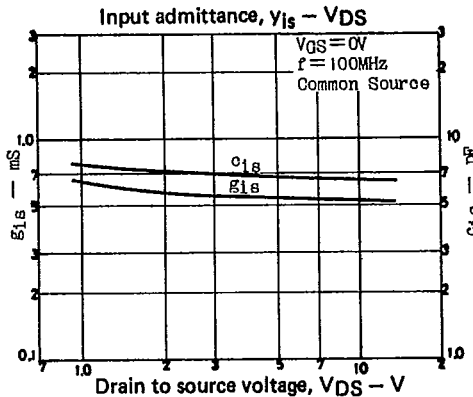






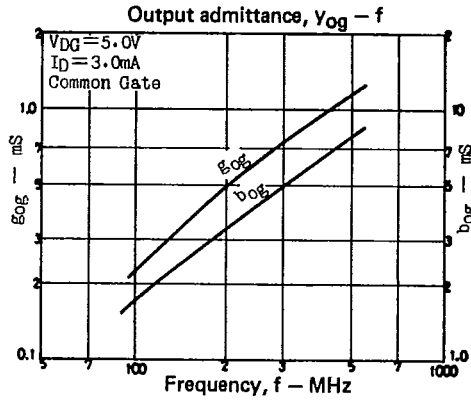
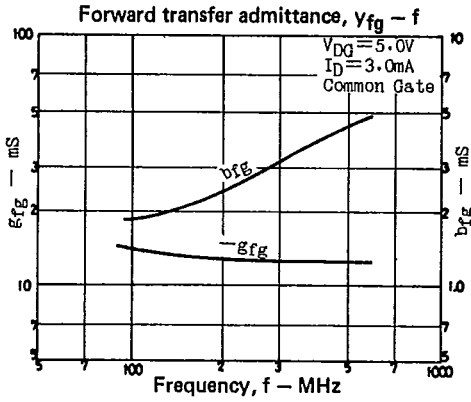
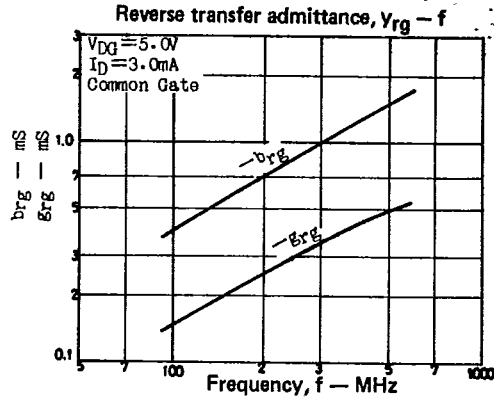
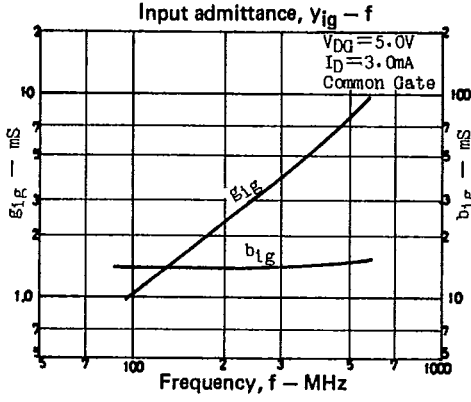
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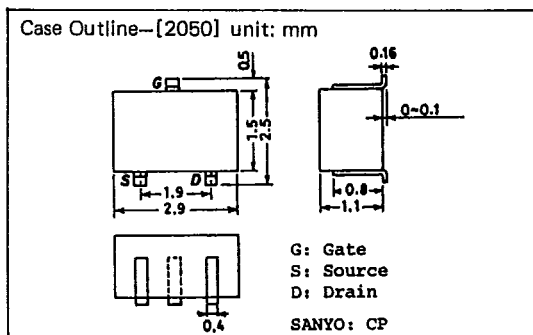
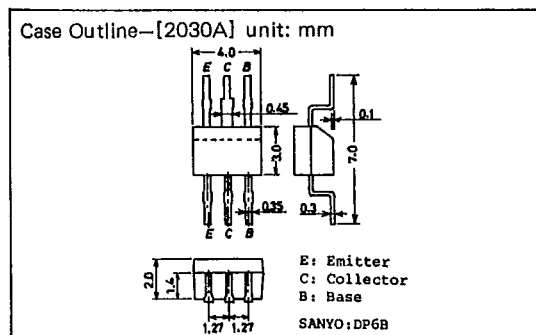
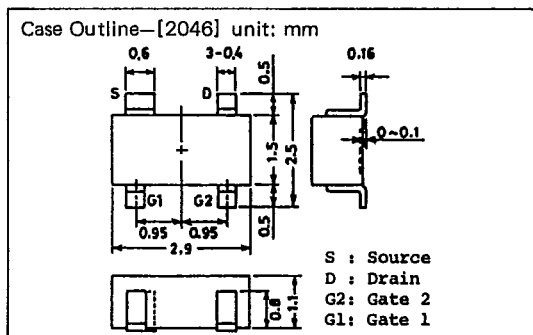
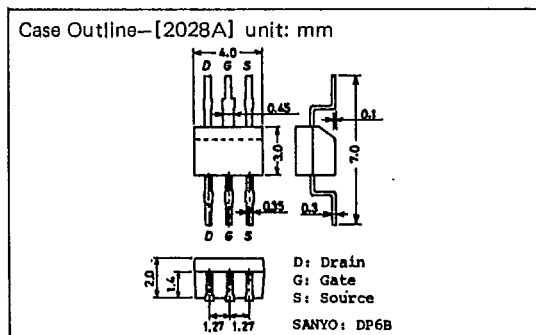
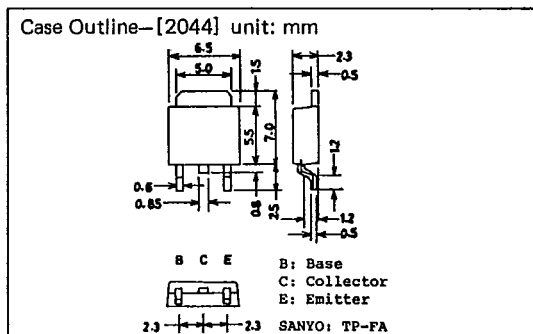
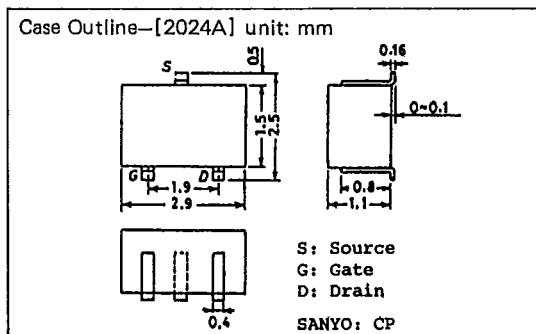
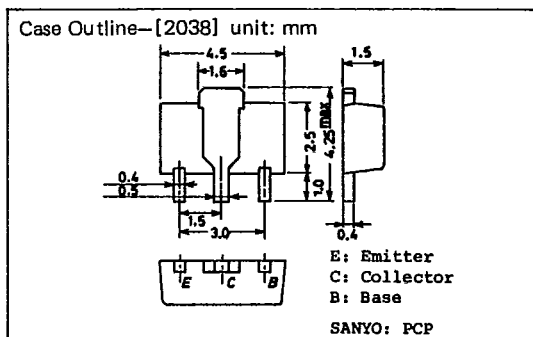
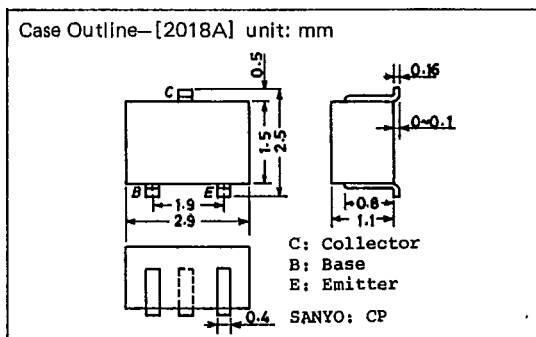
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T-91-20

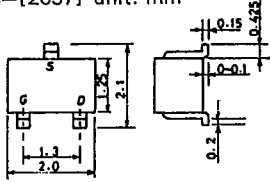
CASE OUTLINES OF SURFACE MOUNT TRANSISTORS

- All of Sanyo surface mount 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.



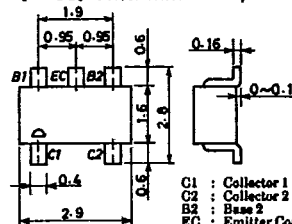
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Case Outline—[2057] unit: mm



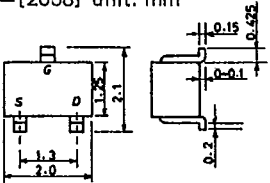
S: Source
G: Gate
D: Drain
SANYO: MCP

Case Outline—[2066] unit: mm



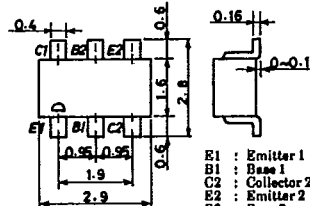
C1 : Collector 1
C2 : Collector 2
B2 : Base 2
EC : Emitter Common
B1 : Base 1
SANYO : CP6

Case Outline—[2058] unit: mm



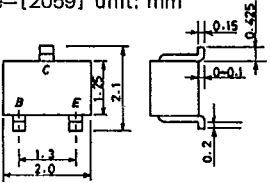
G: Gate
S: Source
D: Drain
SANYO: MCP

Case Outline—[2067] unit: mm



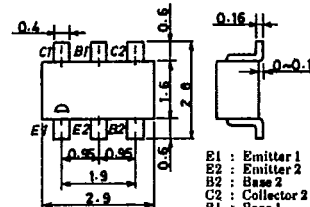
E1 : Emitter 1
B1 : Base 1
C2 : Collector 2
E2 : Emitter 2
B2 : Base 2
C1 : Collector 1
SANYO : CP6

Case Outline—[2059] unit: mm



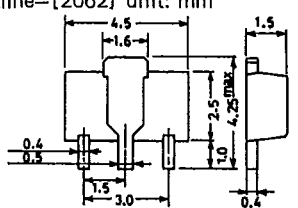
B: Base
C: Collector
E: Emitter
SANYO: MCP

Case Outline—[2068] unit: mm



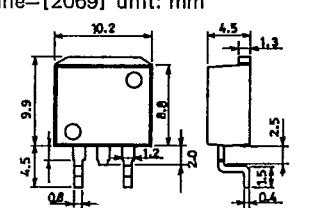
B1 : Emitter 1
E2 : Emitter 2
B2 : Base 2
C2 : Collector 2
B1 : Base 1
C1 : Collector 1
SANYO : CP6

Case Outline—[2062] unit: mm



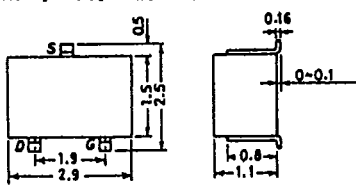
S: Source
D: Drain
G: Gate
SANYO: PCP

Case Outline—[2069] unit: mm



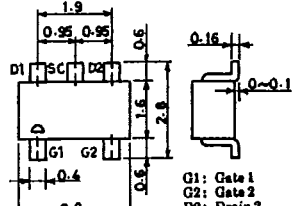
B: Base
C: Collector
E: Emitter
SANYO: SMP

Case Outline—[2065] unit: mm



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

Case Outline—[2070] unit: mm



G1 : Gate 1
G2 : Gate 2
D2 : Drain 2
SC : Source Common
D1 : Drain 1
SANYO : CP6

T-9120

