

2SK242

2024A

N-Channel Junction Silicon FET

High-Frequency General-Purpose Amp Applications

©695F

FEATURES

- Because it is encapsulated in an ultra compact package, compact and low profile sets can be designed.
- Small c_{rss} ($c_{rss} = 0.04$ pF typ).

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

			unit
Gate-drain voltage	V_{GDO}	-20	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}	-55 ~ +125	$^\circ\text{C}$

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

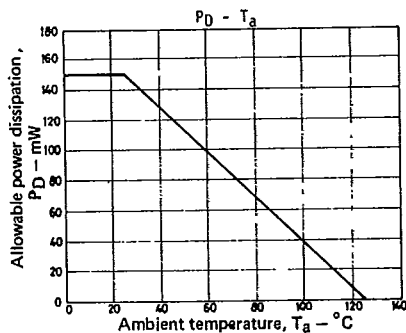
			min	typ	max	unit
Gate-drain breakdown voltage	$V_{(BR) GDO}$	$I_G = -10 \mu\text{A}$	-20			V
Gate cut-off current	I_{GSS}	$V_{GS} = -0.5 \text{ V}, V_{DS} = 0 \text{ V}$			-10	nA
Drain current	I_{DSS}	$V_{DS} = 5 \text{ V}, V_{GS} = 0 \text{ V}$	0.6*		12.0*	mA
Cut-off voltage	$V_{GS(off)}$	$V_{DS} = 5 \text{ V}, I_D = 10 \mu\text{A}$			-2.5	V
Forward transmission admittance	$ y_{fs} (1)$	$V_{DS} = 5 \text{ V}, V_{GS} = 0 \text{ V},$ $f = 1 \text{ kHz}$	2.0	6.0		mS
	$ y_{fs} (2)$	$V_{DS} = 5 \text{ V}, V_{GS} = 0 \text{ V},$ $f = 100 \text{ MHz}$	2.0	6.0		mS
Input capacitance	C_{iss}	$V_{DS} = 5 \text{ V}, V_{GS} = 0 \text{ V}, f = 1 \text{ MHz}$		4.0		pF
Feedback capacitance	C_{rss}	$V_{DS} = 5 \text{ V}, V_{GS} = 0 \text{ V}, f = 1 \text{ MHz}$		0.04	0.15	pF
Output capacitance	C_{oss}	$V_{DS} = 5 \text{ V}, V_{GS} = 0 \text{ V}, f = 1 \text{ MHz}$		4.0		pF
Power gain	PG	$V_{DS} = 5 \text{ V}, V_{GS} = 0 \text{ V}, f = 100 \text{ MHz}$ Refer to specified test circuit		24		dB
Noise figure	NF	$V_{DS} = 5 \text{ V}, V_{GS} = 0 \text{ V}, f = 100 \text{ MHz}$ Refer to specified test circuit		3.5	6.0	dB

* 2SK242 is graded as follows by I_{DSS} (unit : mA):

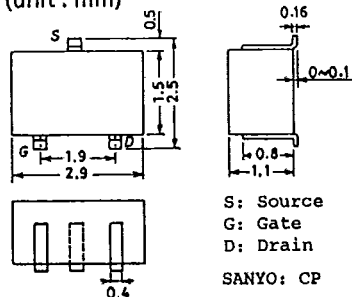
(Note) Marking : T

 I_{DSS} rank : 2, 3, 4, 5

0.6	2	1.5	1.2	3	3.0	2.5	4	6.0	5.0	5	12.0
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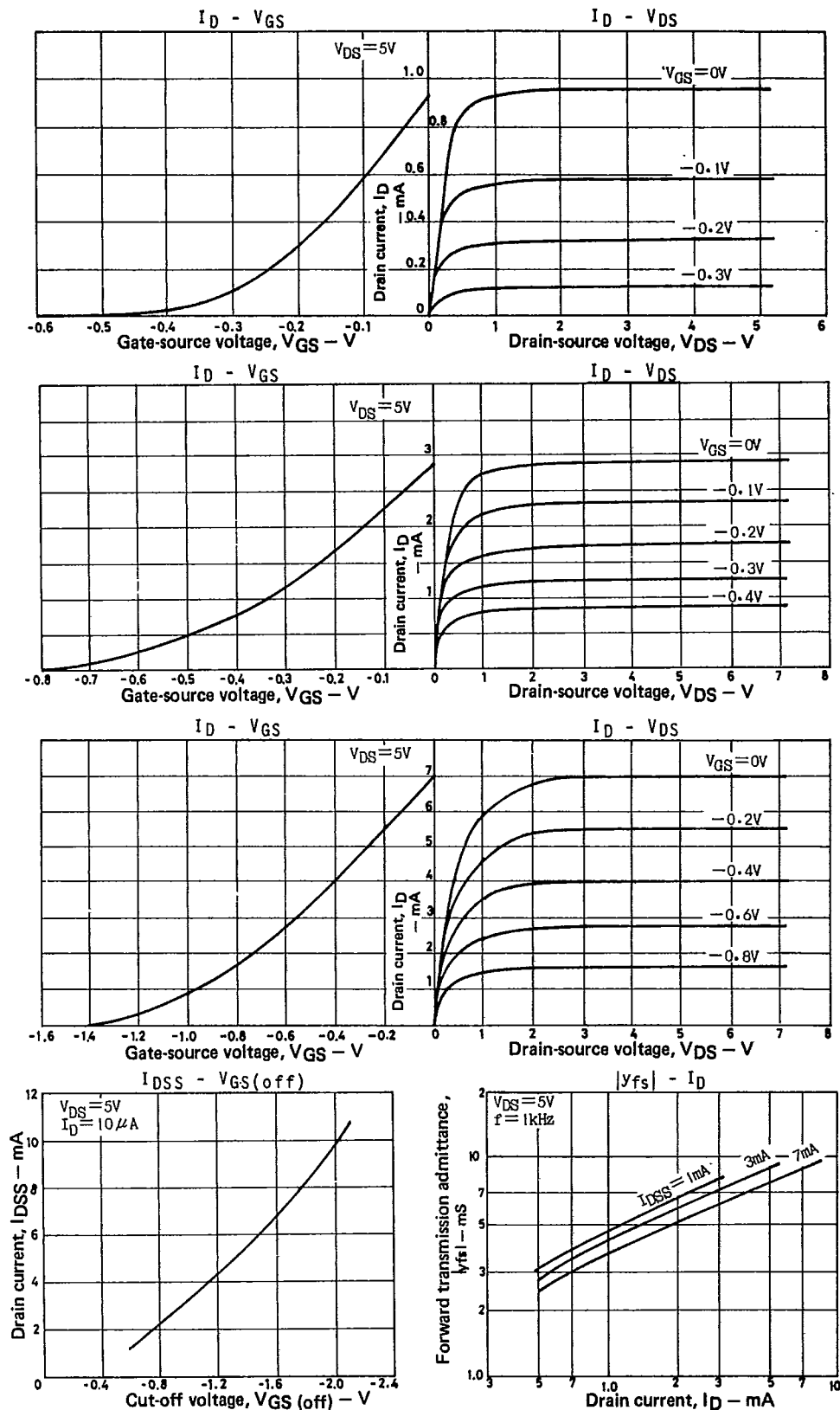
Case Outline 2024A
(unit : mm)



6027KI/3075MW, TS No. 695-1/4

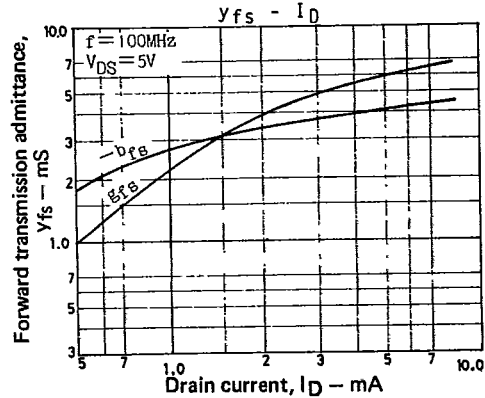
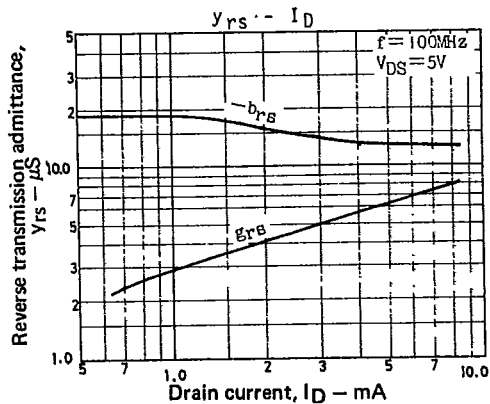
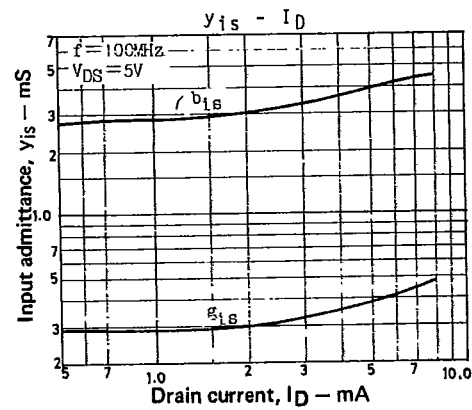
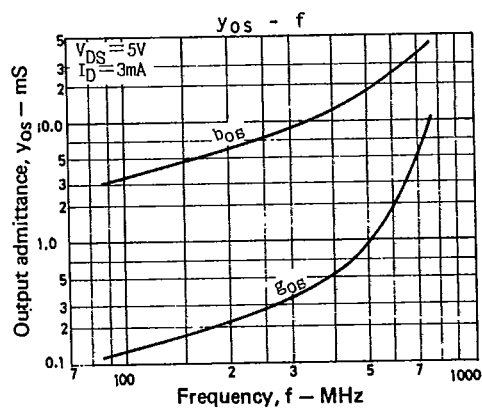
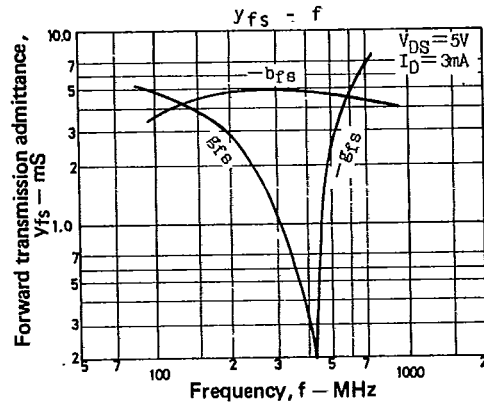
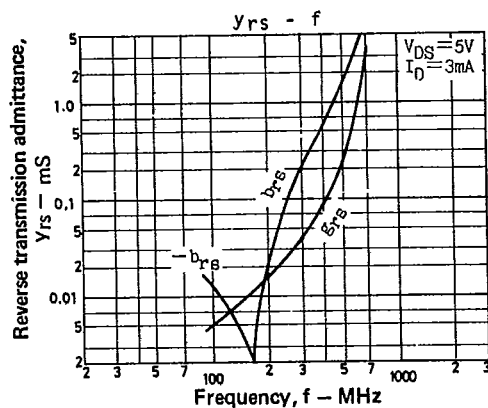
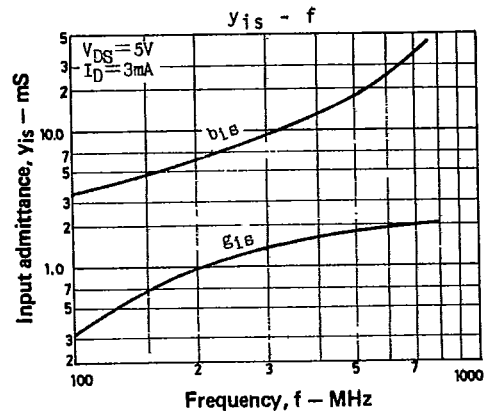
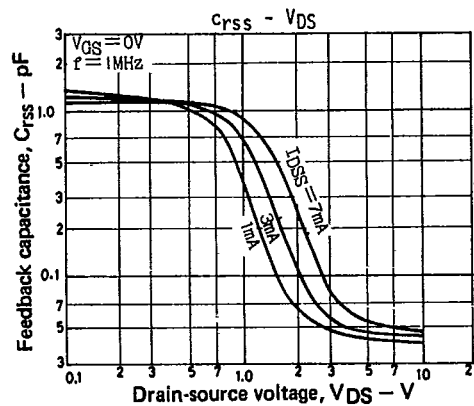
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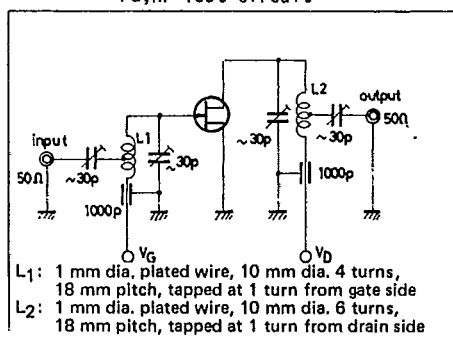
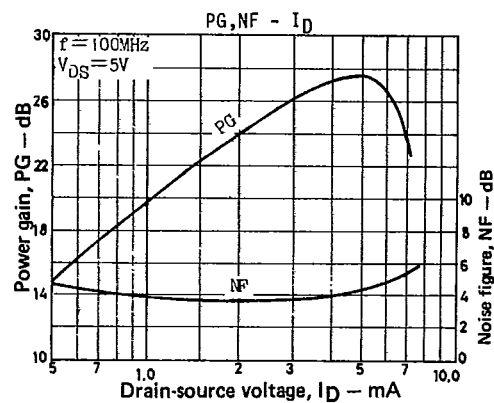
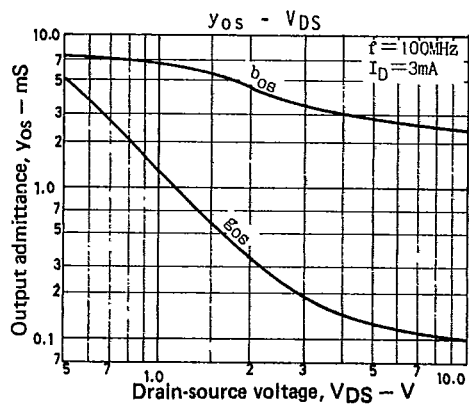
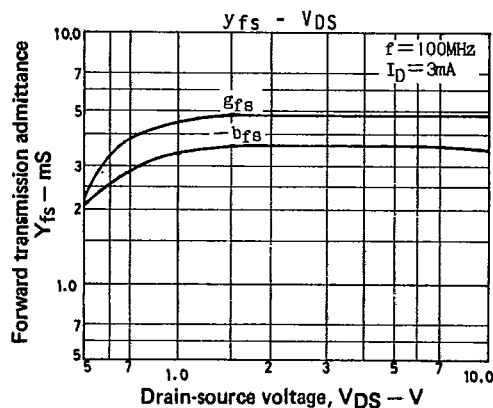
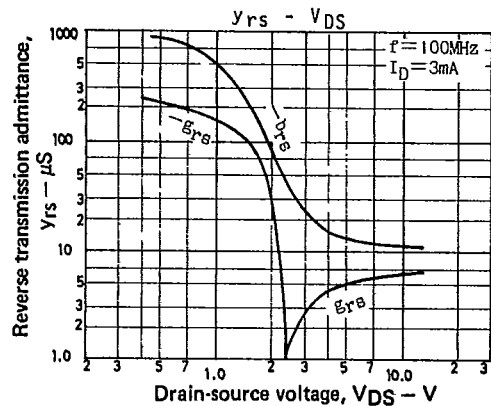
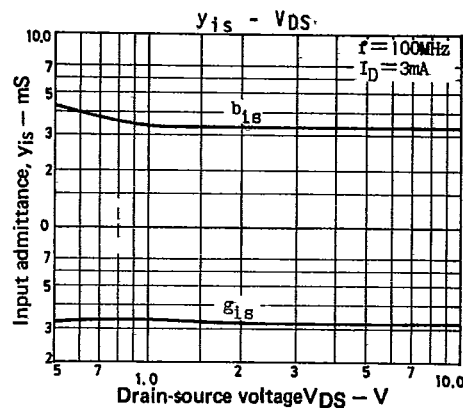
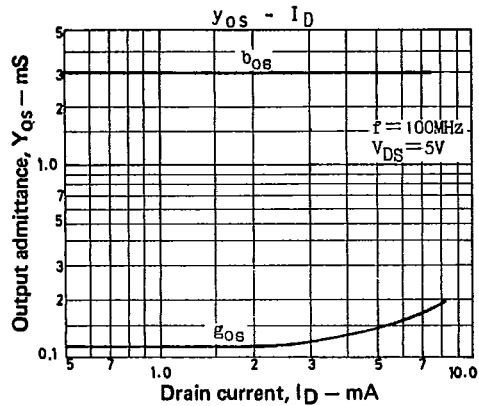
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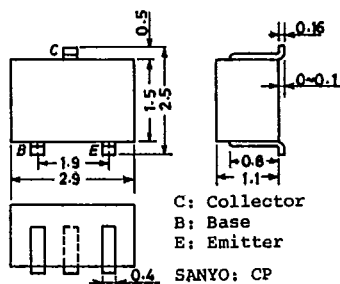


T-91-20

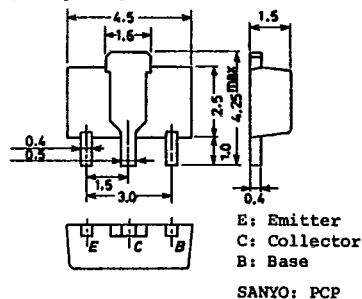
CASE OUTLINES OF SURFACE MOUNT TRANSISTORS

- 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.

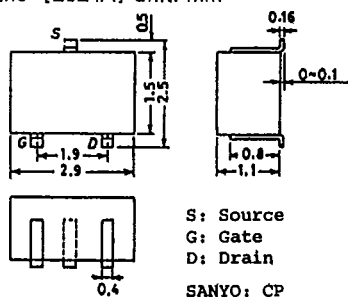
Case Outline—[2018A] unit: mm



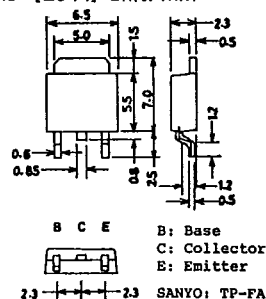
Case Outline—[2038] unit: mm



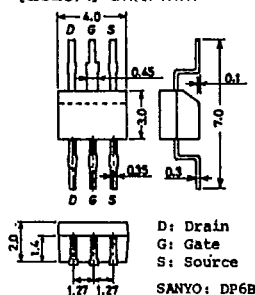
Case Outline—[2024A] unit: mm



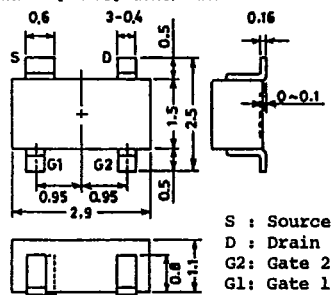
Case Outline—[2044] unit: mm



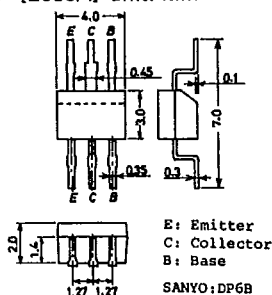
Case Outline—[2028A] unit: mm



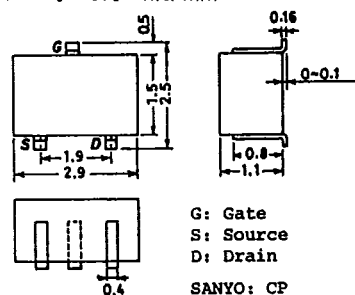
Case Outline—[2046] unit: mm



Case Outline—[2030A] unit: mm

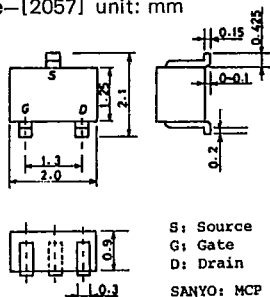


Case Outline—[2050] unit: mm

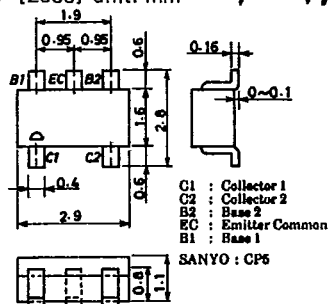


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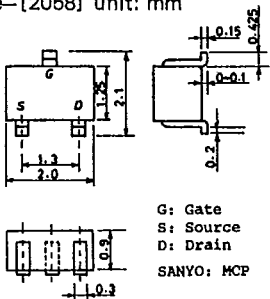
Case Outline—[2057] unit: mm



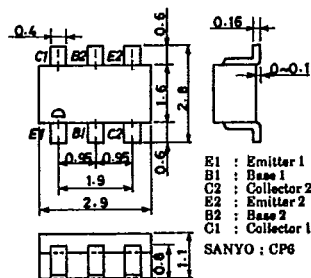
Case Outline—[2066] unit: mm



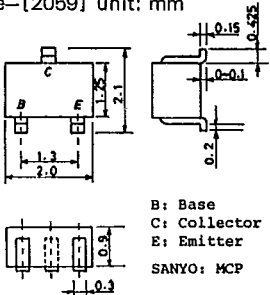
Case Outline—[2058] unit: mm



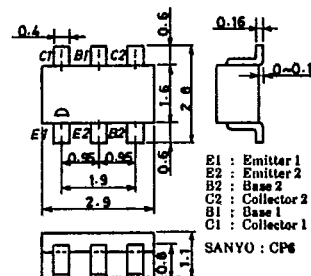
Case Outline—[2067] unit: mm



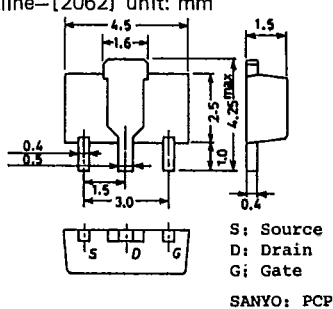
Case Outline—[2059] unit: mm



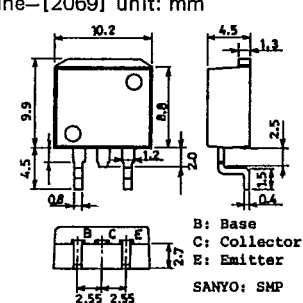
Case Outline—[2068] unit: mm



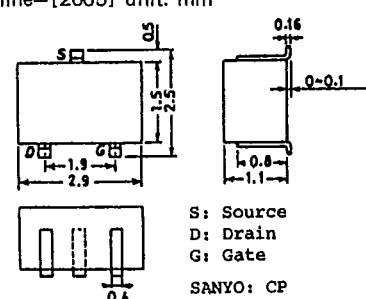
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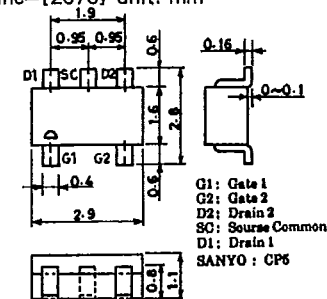
Case Outline—[2069] unit: mm



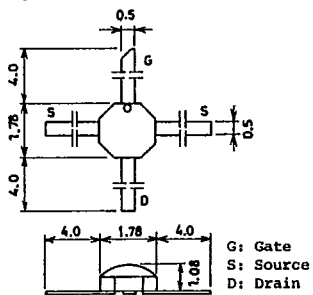
Case Outline—[2065] unit: mm



Case Outline—[2070] unit: mm

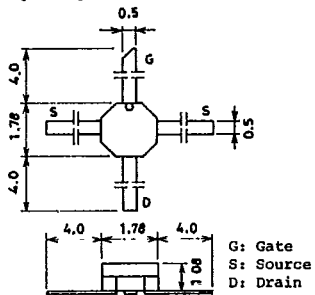


Case Outline-[2071] unit: mm



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Case Outline-[2072] unit: mm



Case Outline-[2073] unit: mm

