

<b>SANYO</b>	No.4871	<b>2SK2171</b>
		N-Channel Junction Silicon FET High-Frequency, Low-Frequency Amp Analog Switch Applications

**Features**

- Adoption of FBET process.
- Large  $|Y_{fs}|$ .
- Small Ciss.
- High  $P_D$  allowable power dissipation.

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

			unit
Drain-to-Source Voltage	$V_{DSX}$	40	V
Gate-to-Drain Voltage	$V_{GDS}$	-40	V
Gate Current	$I_G$	10	mA
Drain Current	$I_D$	100	mA
Allowable Power Dissipation	$P_D$	400	mW
		Mounted on ceramic board (250mm <sup>2</sup> × 0.8mm)	800 mW
Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{stg}$	-55 to +150	°C

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

		min	typ	max	unit
G-D Breakdown Voltage	$V_{(BR)GDS}$ $I_G = -10\mu\text{A}, V_{DS} = 0$	-40			V
Gate-to-Source Leakage Current	$I_{GSS}$ $V_{GS} = -20\text{V}, V_{DS} = 0$			-1.0	nA
Cutoff Voltage	$V_{GS(off)}$ $V_{DS} = 10\text{V}, I_D = 100\mu\text{A}$	-2.0	-3.0	-5.0	V
Drain Current	$I_{DSS}^*$ $V_{DS} = 10\text{V}, V_{GS} = 0$	40*		75*	mA
Forward Transfer Admittance	$ Y_{fs} $ (1) $V_{DS} = 10\text{V}, I_D = 10\text{mA}, f = 1\text{kHz}$	10	15		mS
	$ Y_{fs} $ (2) $V_{DS} = 10\text{V}, V_{GS} = 0, f = 1\text{kHz}$	22	30		mS
Input Capacitance	Ciss $V_{DS} = 10\text{V}, V_{GS} = 0, f = 1\text{MHz}$		11		pF
Reverse Transfer Capacitance	Crss $V_{DS} = 10\text{V}, V_{GS} = 0, f = 1\text{MHz}$		2.5		pF
Noise Figure	NF $V_{DS} = 10\text{V}, R_g = 1\text{k}\Omega, I_D = 1\text{mA}, f = 1\text{kHz}$		1.5		dB
Static Drain-to-Source ON-State Resistance	$R_{DS(on)}$ $V_{DS} = 10\text{mV}, V_{GS} = 0$		30		$\Omega$

\*Pulse Test Pulse Width  $\leq 2\text{mS}$

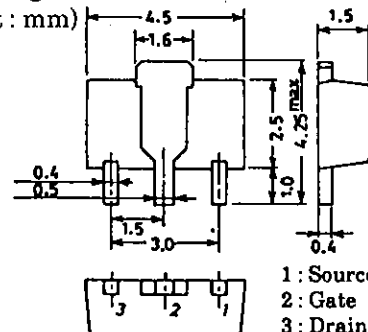
※ : The 2SK2171 is classified by  $I_{DSS}$  as follows : (unit : mA)

40	3	52	48	4	63	57	5	75
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Marking : KM

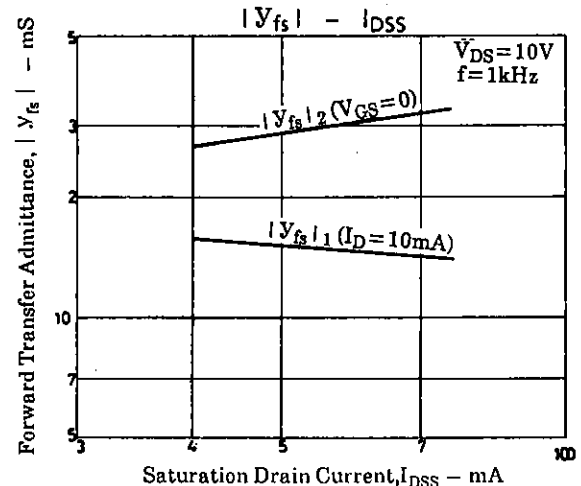
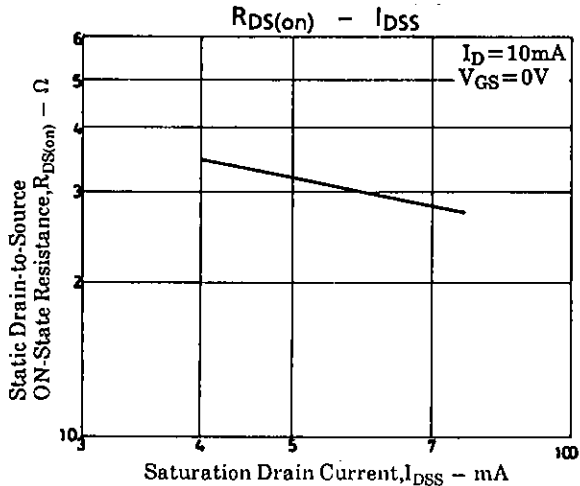
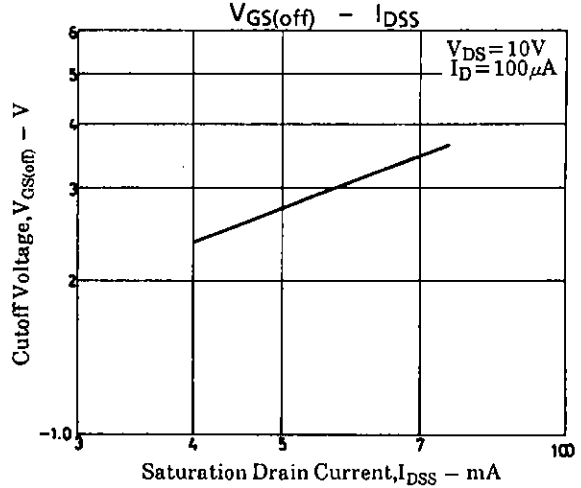
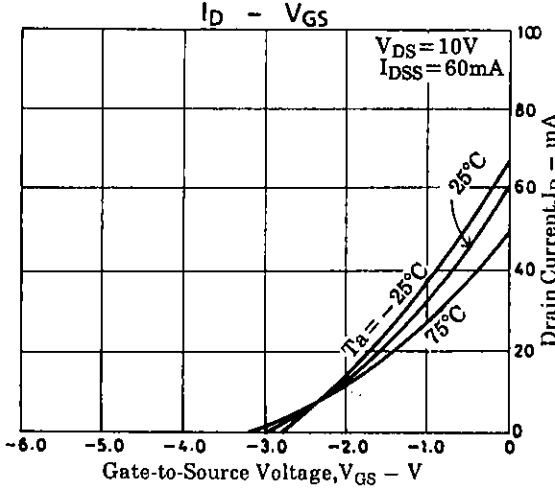
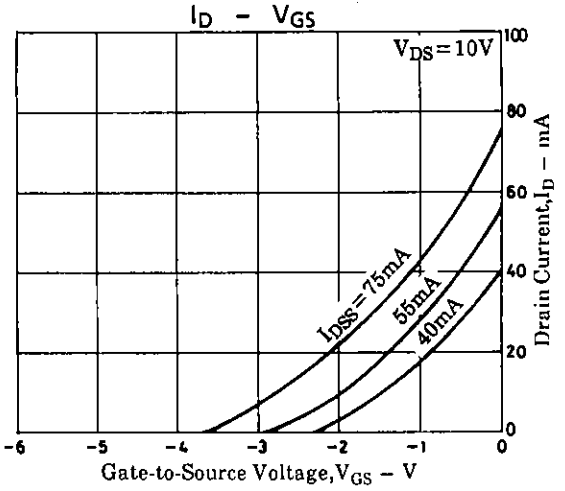
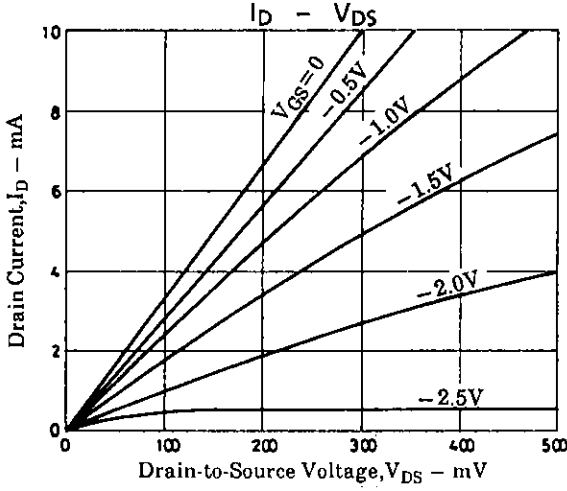
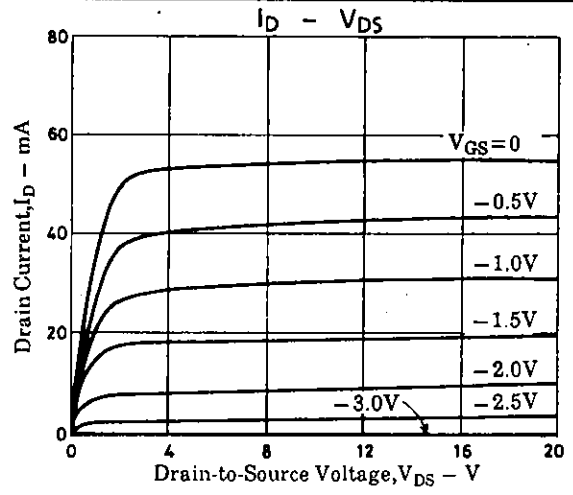
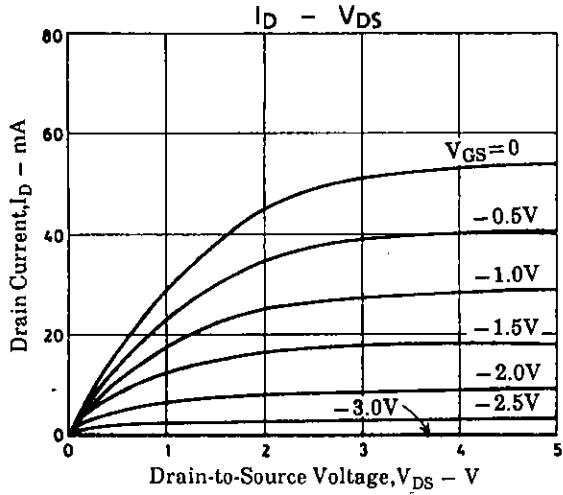
$I_{DSS}$  rank : 3, 4, 5

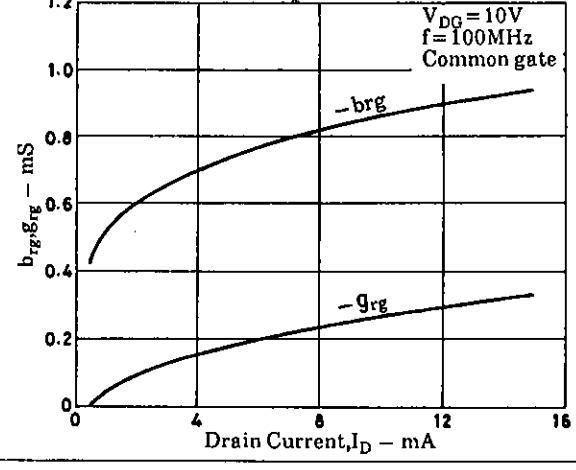
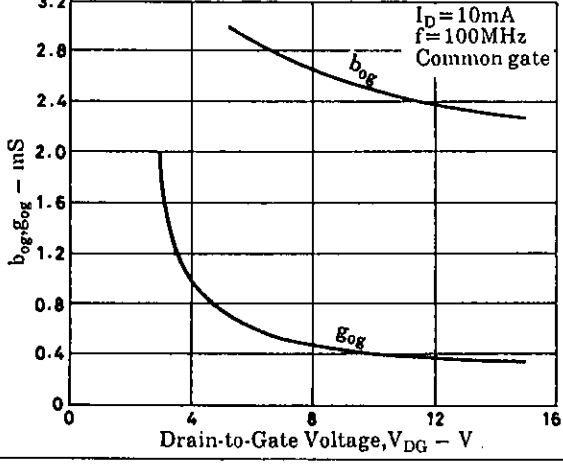
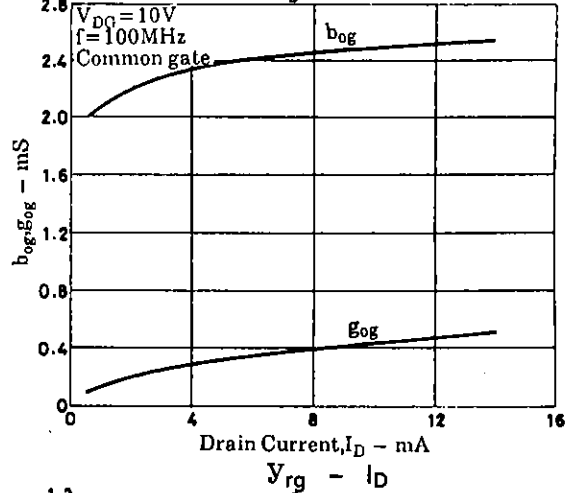
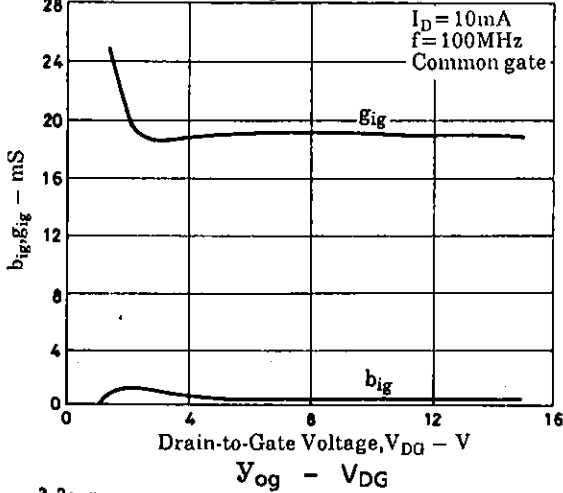
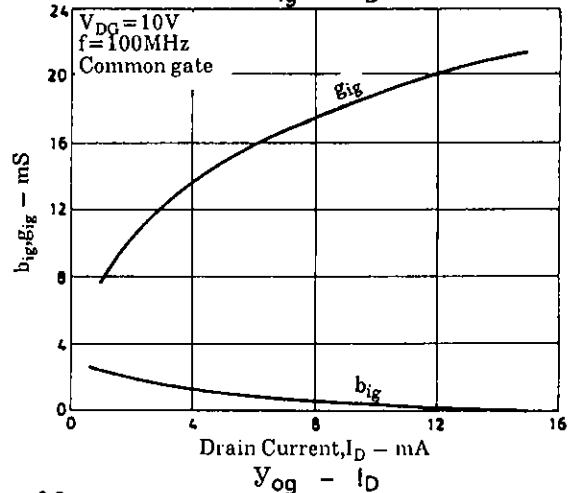
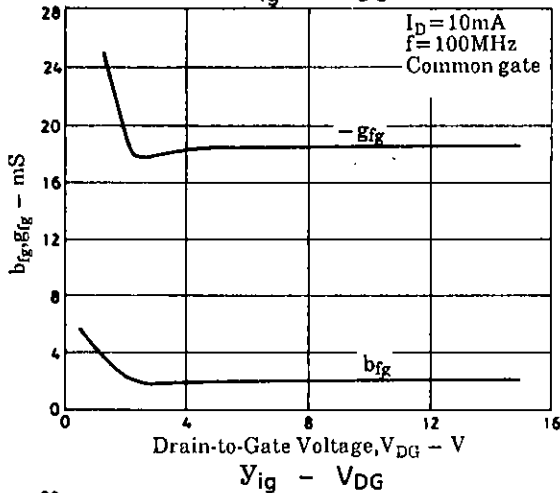
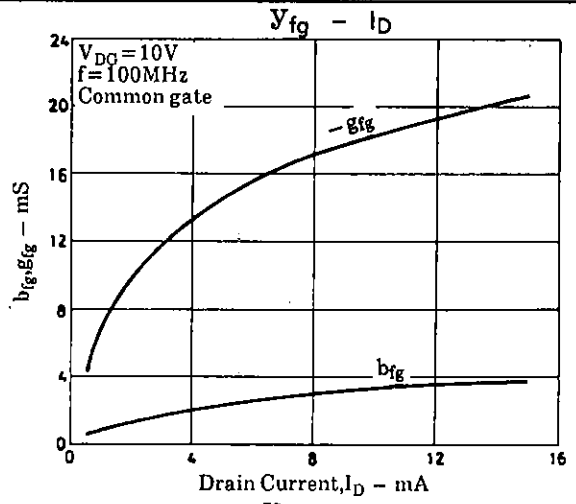
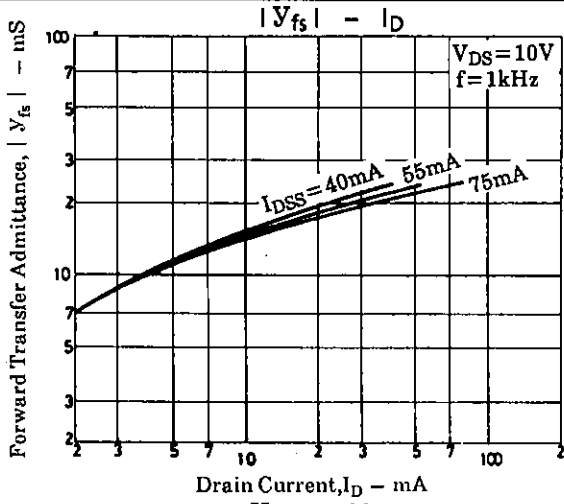
**Package Dimensions 2125**  
(unit : mm)

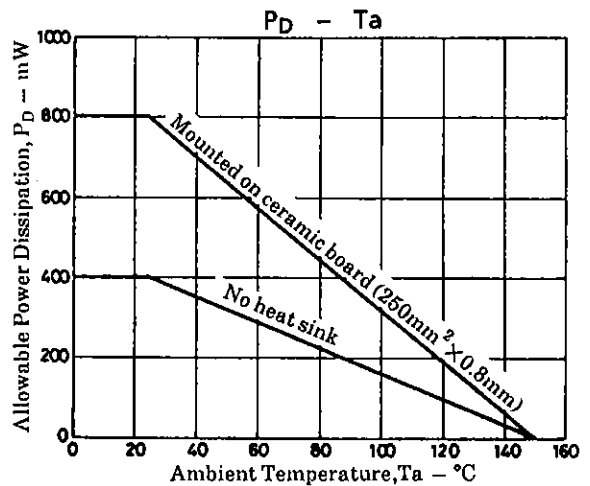
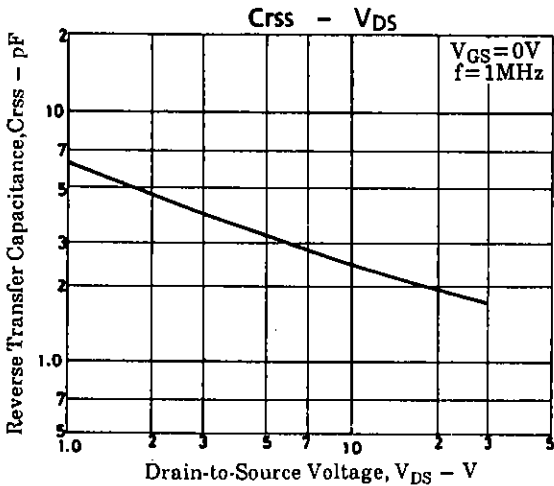
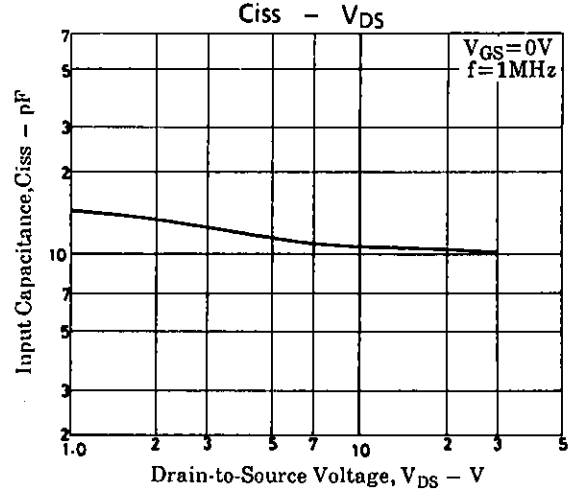
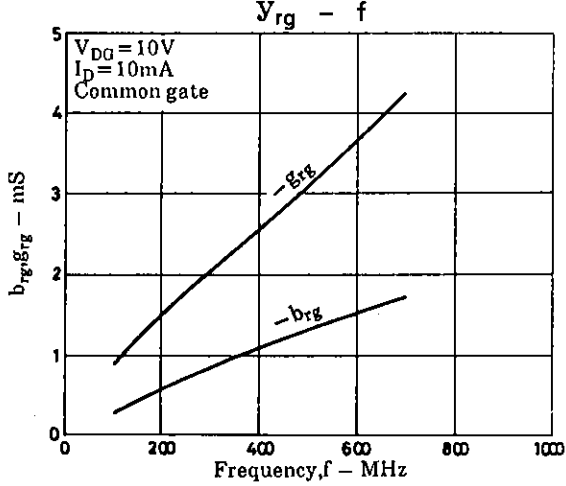
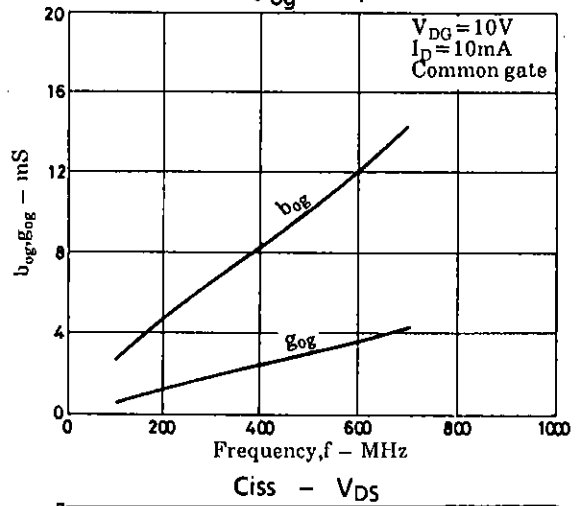
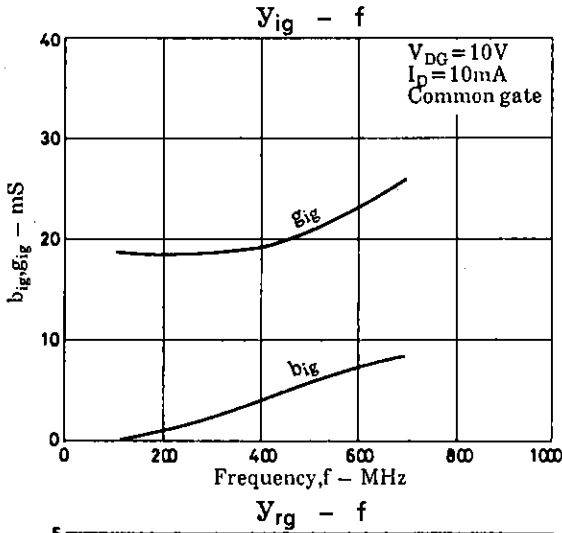
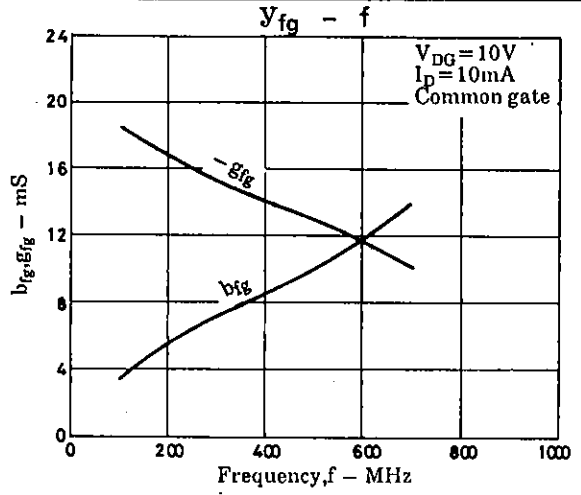
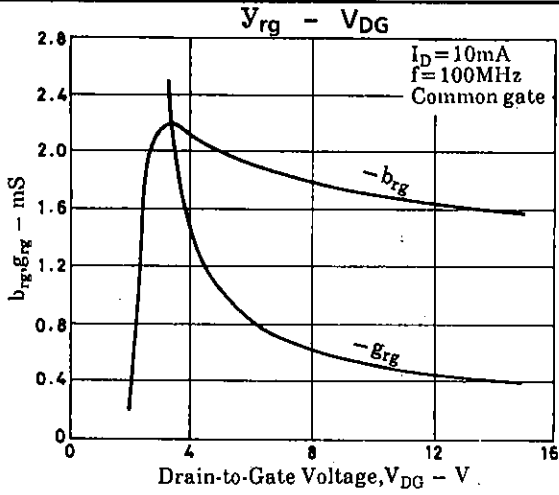


- 1 : Source
- 2 : Gate
- 3 : Drain

SANYO : PCP  
(Bottom View)







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