

SANYO

No.1792C

2SK544

N-Channel MOS Silicon FET

FM Tuner, VHF Amp Applications

Features

- Low noise: NF=1.8dB typ (f=100MHz)
- High power gain: PG=27dB typ (f=100MHz)
- Small reverse transfer capacitance: $c_{rss}=0.035\text{pF}$ ($V_{DS}=10\text{V}$, $f=1\text{MHz}$)

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

		unit
Drain to Source Voltage	V_{DS}	20 V
Gate to Source Voltage	V_{GS}	± 5 V
Drain Current	I_D	30 mA
Allowable Power Dissipation	P_D	300 mW
Channel Temperature	T_{ch}	125 $^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +125 $^\circ\text{C}$

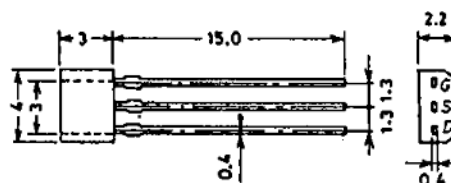
Electrical Characteristics at $T_a=25^\circ\text{C}$

			min	typ	max	unit
Drain to Source Voltage	V_{DSX}	$V_{GS}=-4\text{V}, I_D=100\mu\text{A}$	20			V
Gate Cutoff Current	I_{GSS}	$V_{DS}=0\text{V}, V_{GS}=\pm 5\text{V}$			10	nA
Drain Current	I_{DSS}	$V_{DS}=10\text{V}, V_{GS}=0\text{V}$	1.2*		12*	mA
Gate to Source Cutoff Voltage	$V_{GS(off)}$	$V_{DS}=10\text{V}, I_D=100\mu\text{A}$			-2.5	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=10\text{V}, V_{GS}=0\text{V}, f=1\text{kHz}$		11		mS
Input Capacitance	c_{iss}	$V_{DS}=10\text{V}, V_{GS}=0\text{V}, f=1\text{kHz}$		2.4		pF
Reverse Transfer Capacitance	c_{rss}			0.035		pF
Power Gain	PG	$V_{DS}=10\text{V}, V_{GS}=0\text{V}, f=100\text{MHz}$		27		dB
Noise Figure	NF	See specified Test Circuit.	1.8	3.0		dB

*: The 2SK544 is classified by I_{DSS} as follows (unit: mA):

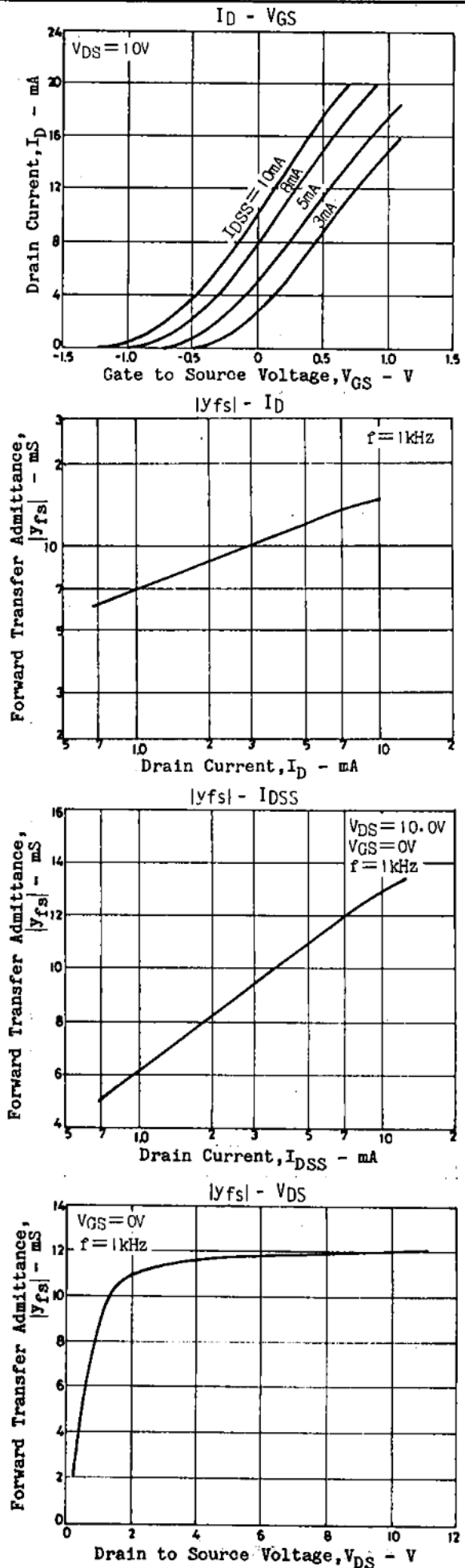
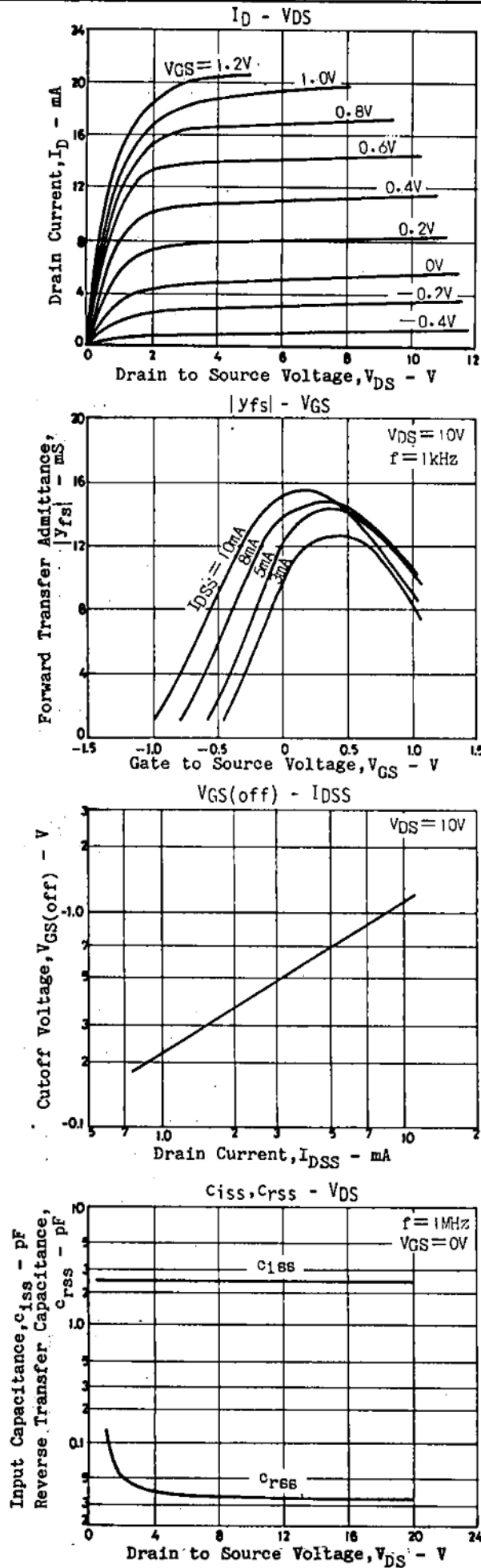
1.2	D	3.0	2.5	E	6.0	5.0	F	12
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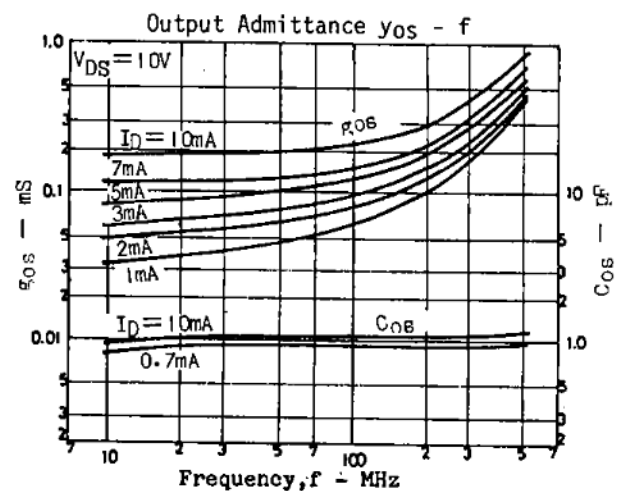
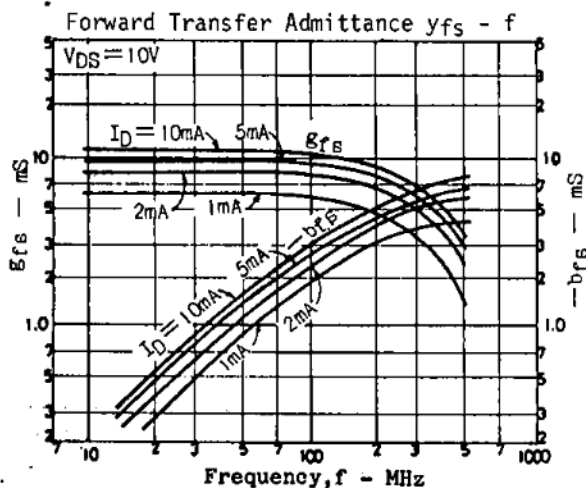
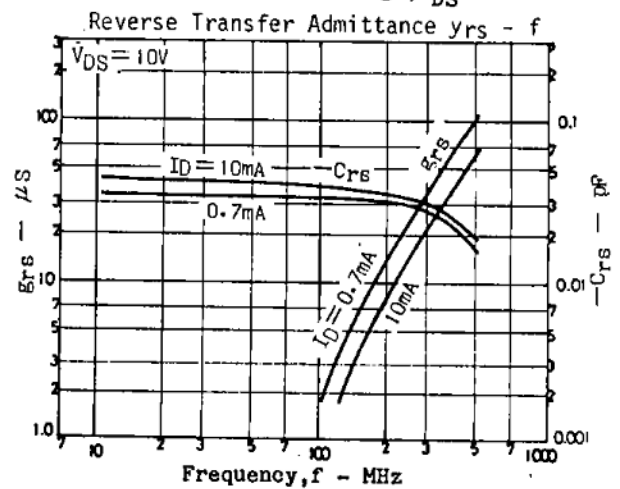
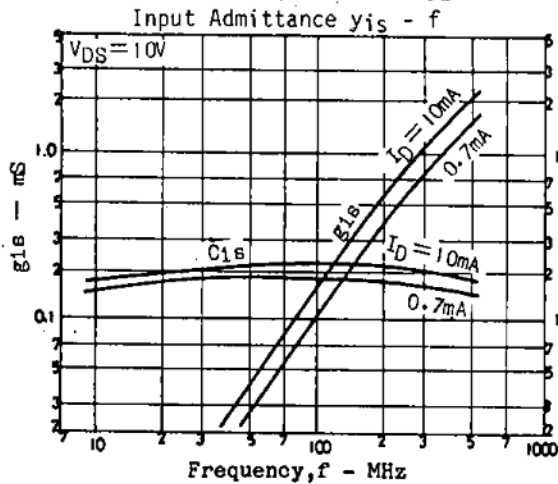
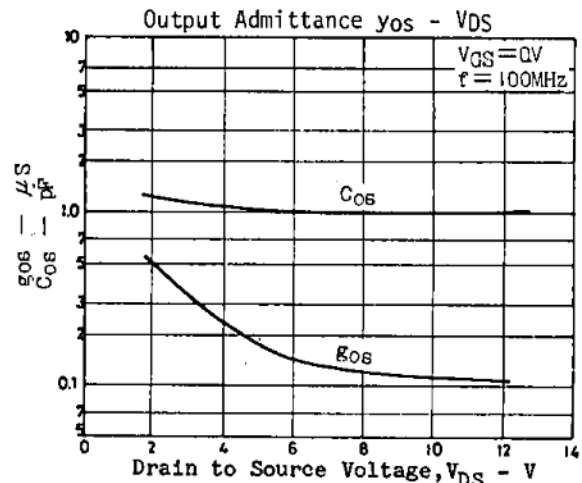
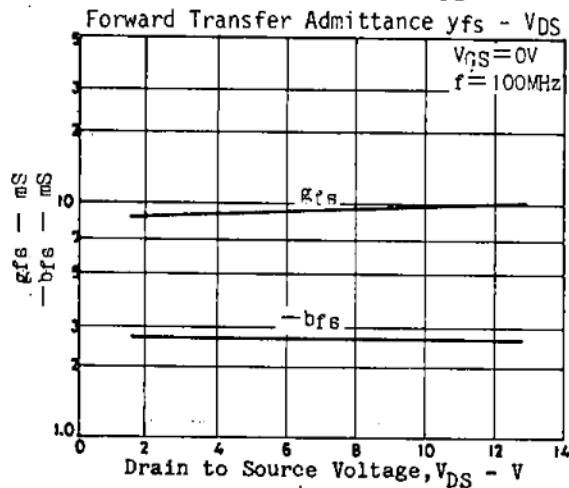
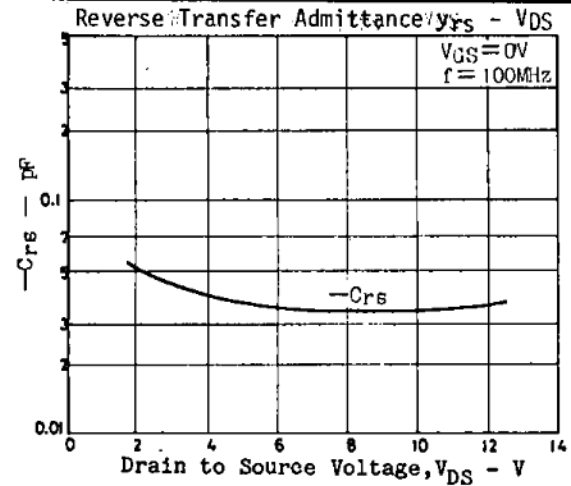
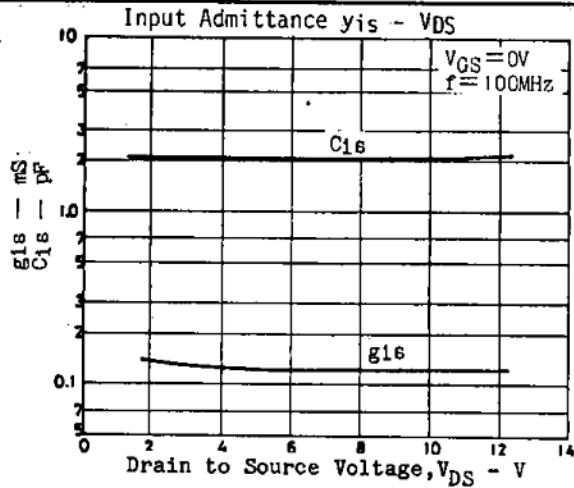
Package Dimensions 2040
(unit: mm)

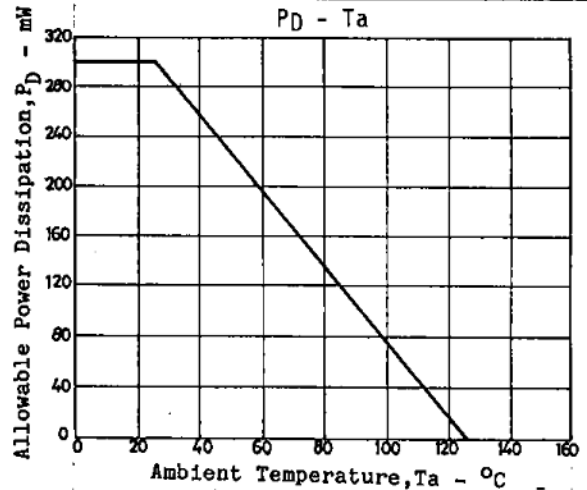
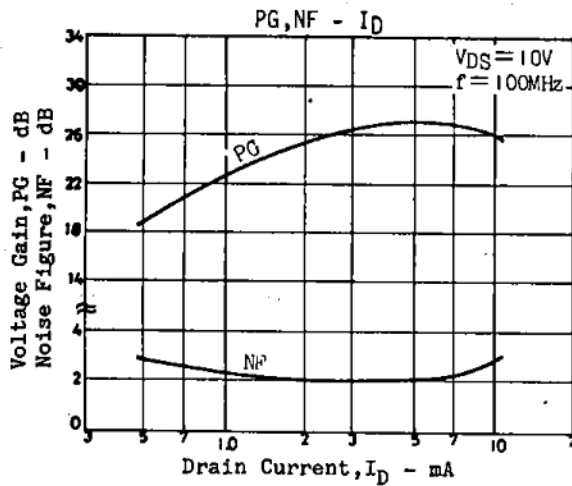


G: Gate
S: Source
D: Drain

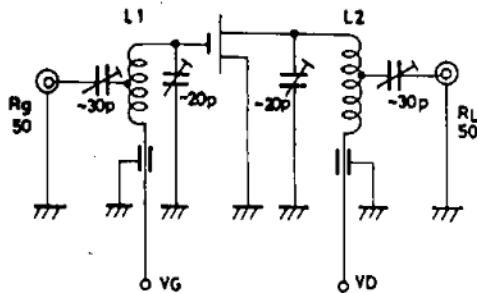
SANYO: SPA







PG, NF Test Circuit



Unit(Capacitance : F)

- L1: 1.0mm ϕ plated wire 10mm ϕ 6T, tap: 3T from H side
 L2: 1.0mm ϕ plated wire 10mm ϕ 7T, tap: 4T from H side

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