

SANYO	No.2719	2SK1067
		N-Channel MOS Silicon FET FM Tuner, VHF-Band Amp Applications

Features

- Low noise $NF = 1.8\text{dB typ}(f = 100\text{MHz})$
- High power gain $PG = 27\text{dB typ}(f = 100\text{MHz})$
- Small reverse transfer capacitance $c_{rss} = 0.035\text{pF}(V_{DS} = 10\text{V}, f = 1\text{MHz})$
- Very small-sized package(MCP) permitting 2SK1067-applied sets to be made smaller and slimmer

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

			unit
Drain to Source Voltage	V_{DS}	16	V
Gate to Source Voltage	V_{GS}	± 5	V
Drain Current	I_D	30	mA
Allowable Power Dissipation	P_D	150	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}	$V_{GS} = -4\text{V}, I_D = 100\mu\text{A}$	16			V
Gate Cutoff Current	I_{GSS}	$V_{DS} = 0\text{V}, V_{GS} = \pm 5\text{V}$			10	nA
Drain Current	I_{DSS}	$V_{DS} = 10\text{V}, V_{GS} = 0$	≈ 1.2		≈ 12.0	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} $	$V_{DS} = 10\text{V}, V_{GS} = 0, f = 1\text{kHz}$		11		mS
Input Capacitance	c_{iss}	$V_{DS} = 10\text{V}, V_{GS} = 0, f = 1\text{MHz}$		2.3		pF
Reverse Transfer Capacitance	c_{rss}	$V_{DS} = 10\text{V}, V_{GS} = 0, f = 1\text{MHz}$	0.035			pF
Power Gain	PG	$V_{DS} = 10\text{V}, V_{GS} = 0, f = 100\text{MHz}$		27		dB
Noise Figure	NF	See specified Test Circuit. $V_{DS} = 10\text{V}, V_{GS} = 0, f = 100\text{MHz}$	1.8	3.0		dB

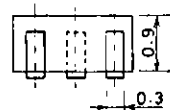
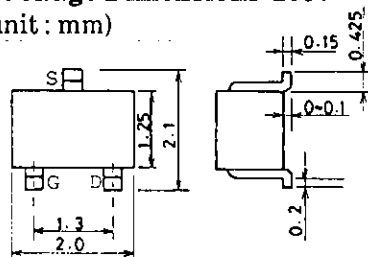
※ : The 2SK1067 is classified by I_{DSS} as follows (unit : mA) :

1.2	3	3.0	2.5	4	6.0	5.0	5	12.0
-----	---	-----	-----	---	-----	-----	---	------

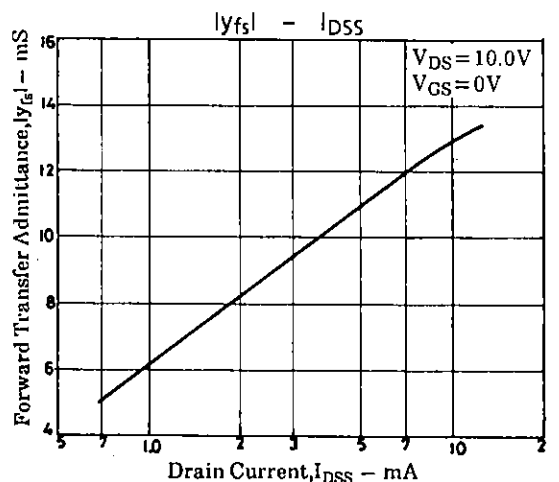
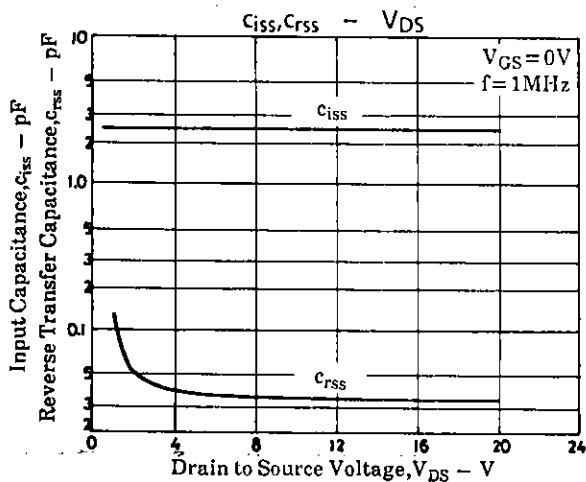
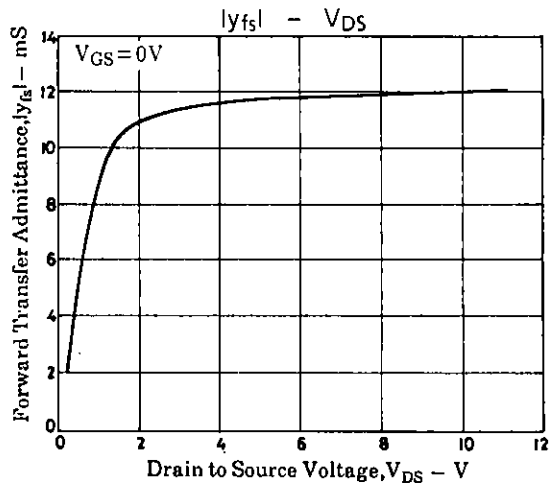
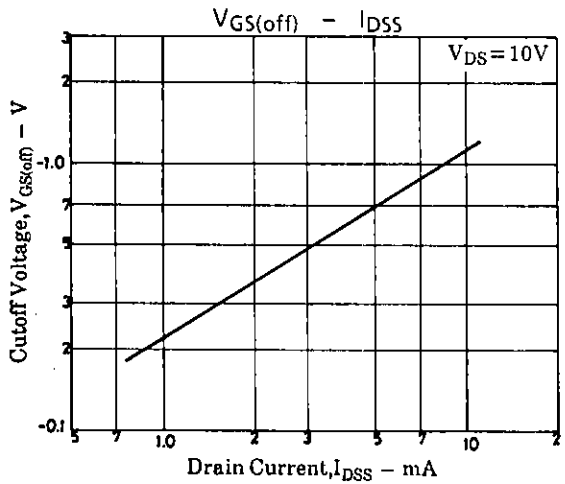
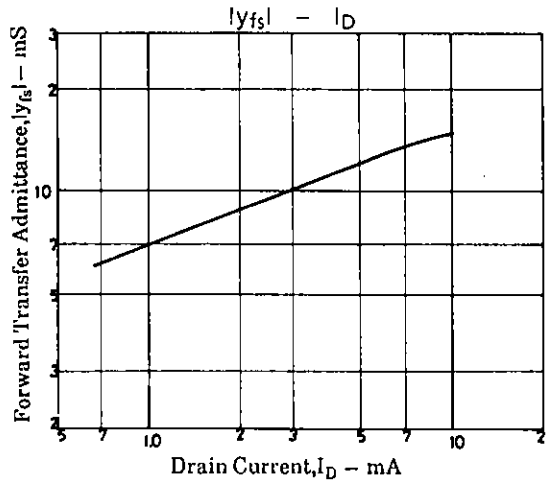
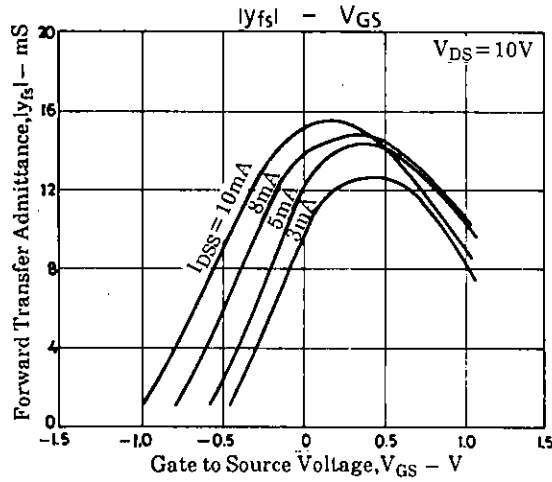
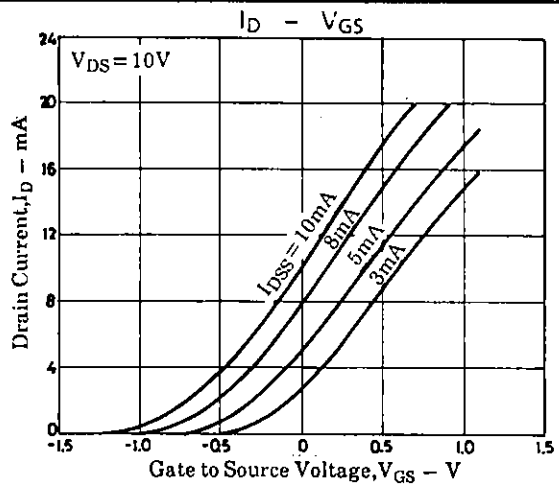
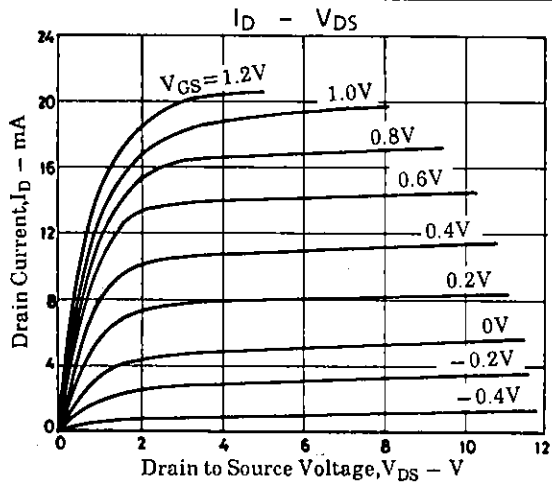
(Note) Marking : CJ
 I_{DSS} rank : 3,4,5

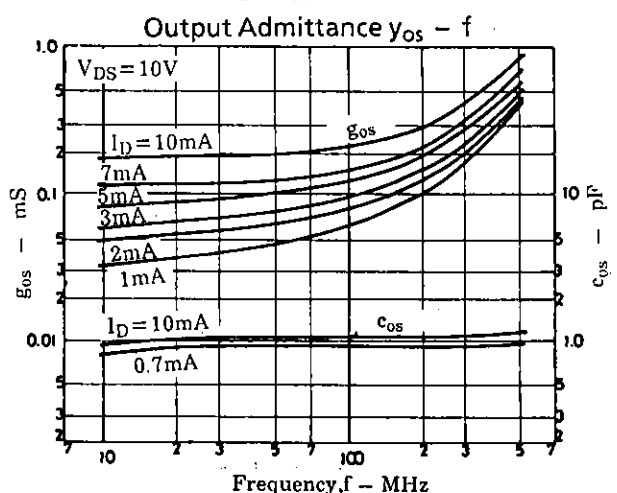
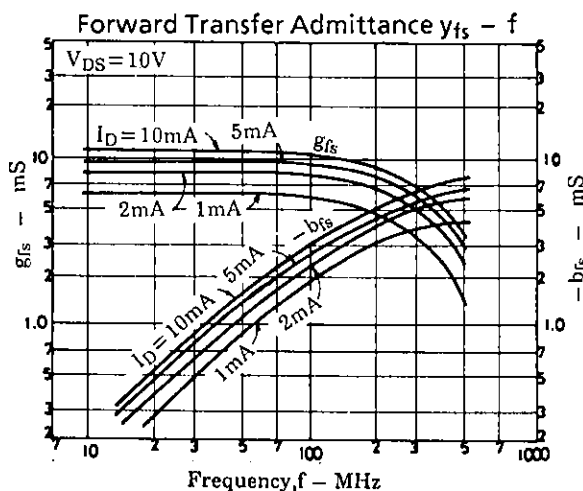
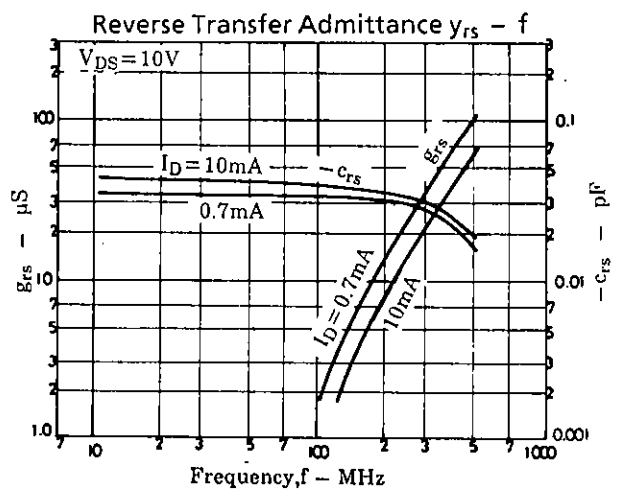
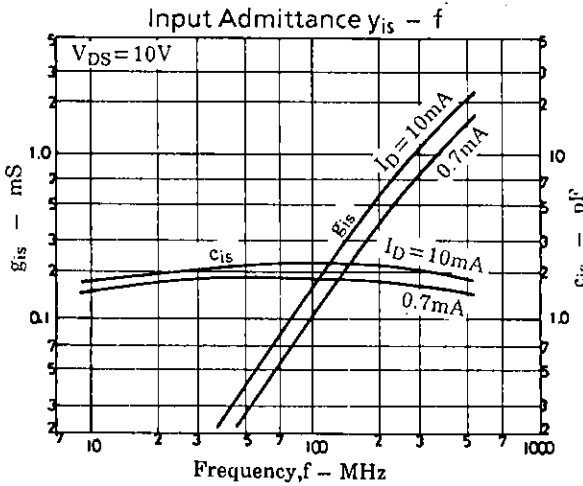
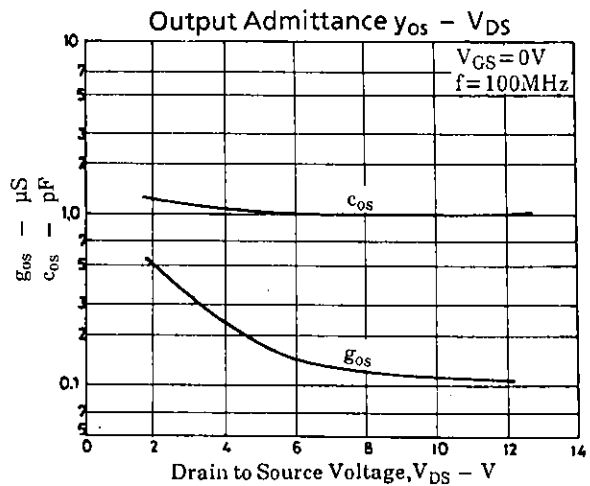
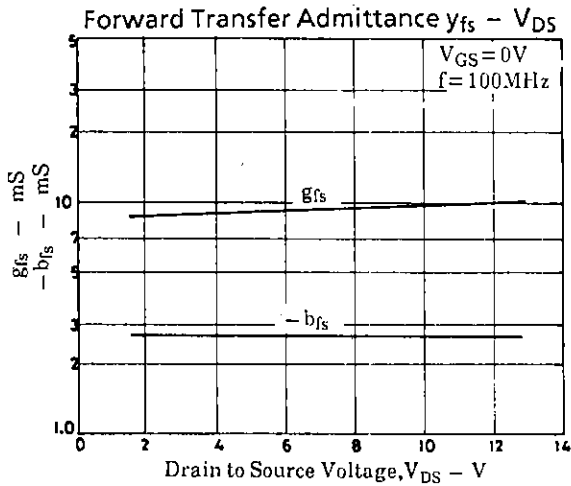
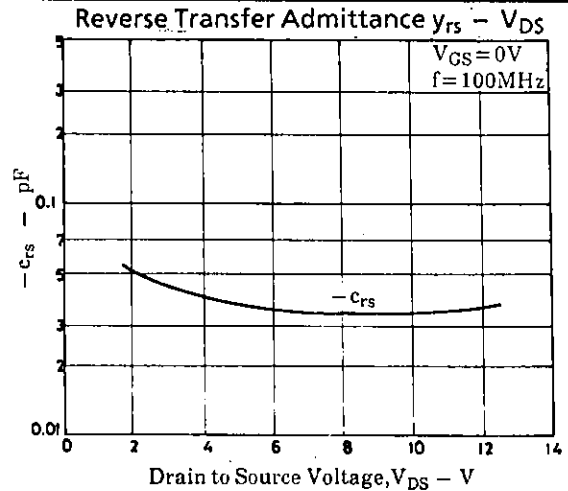
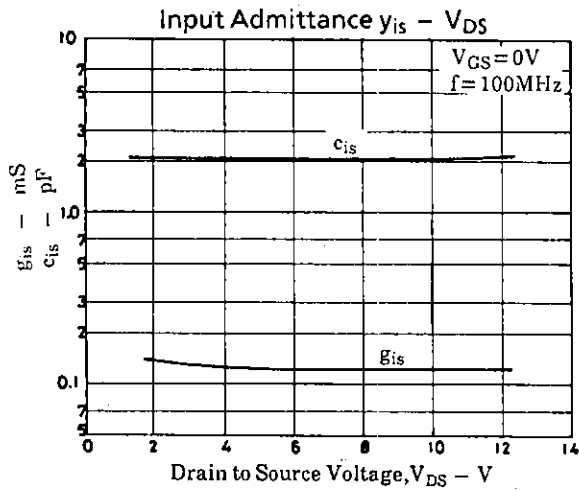
Package Dimensions 2057

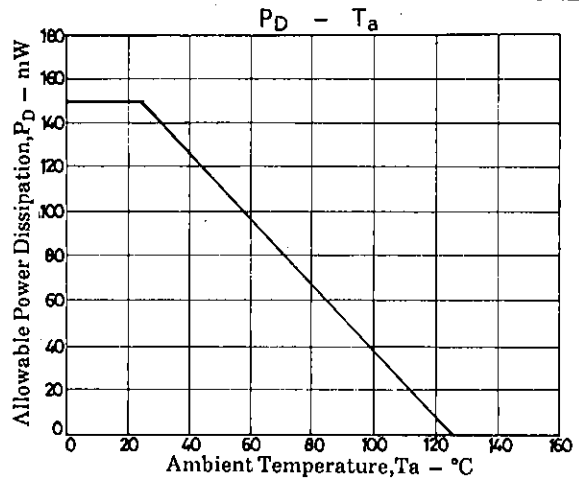
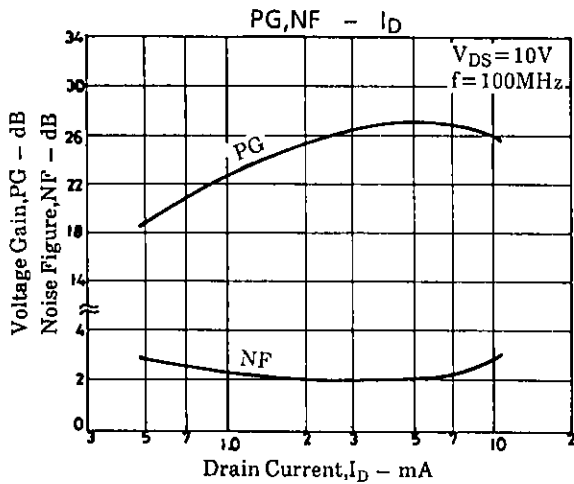
(unit : mm)



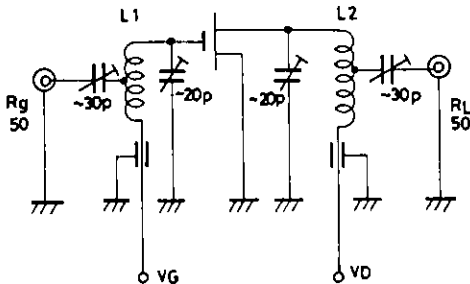
SANYO: MCP
G: Gate
S: Source
D: Drain







PG, NF Test Circuit



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

Unit (Resistance : Ω , Capacitance : F)

- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use;
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.