

SANYO	No.3006	2SK937
		N-Channel Junction Silicon FET High-Frequency General-Purpose Amp Applications

Features

- Adoption of FBET process
- Large $|y_{fs}|$
- Small c_{iss}

Absolute Maximum Ratings at Ta = 25°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	300	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

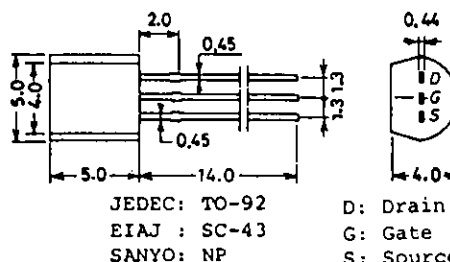
Electrical Characteristics at Ta = 25°C

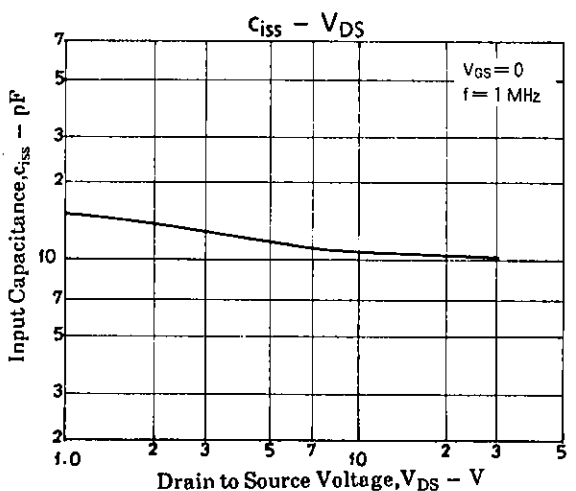
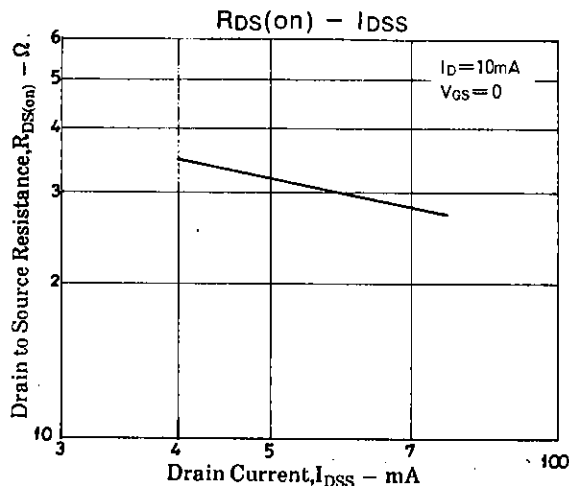
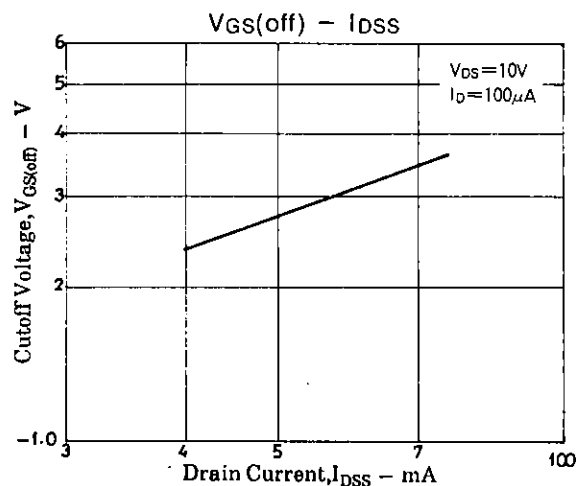
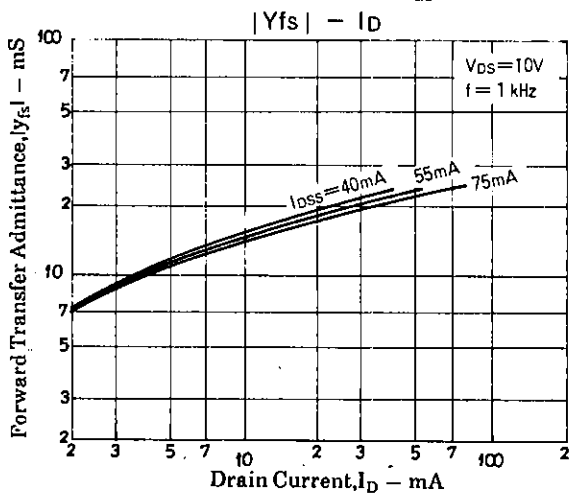
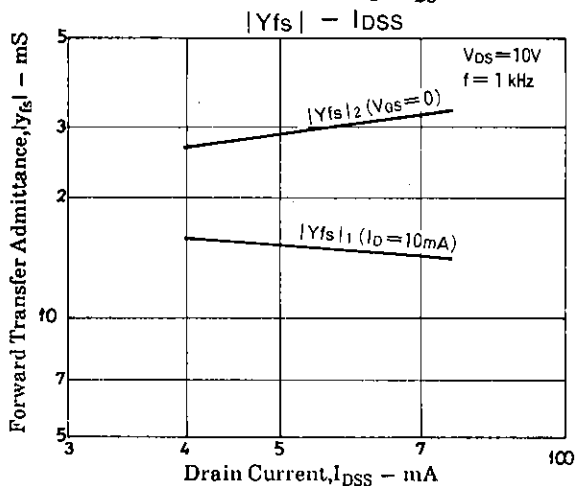
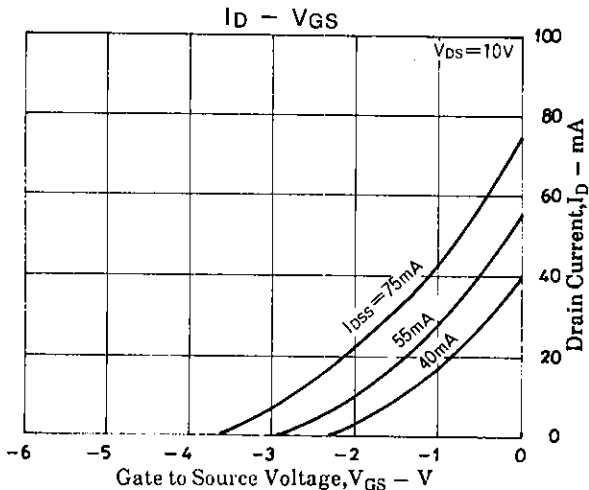
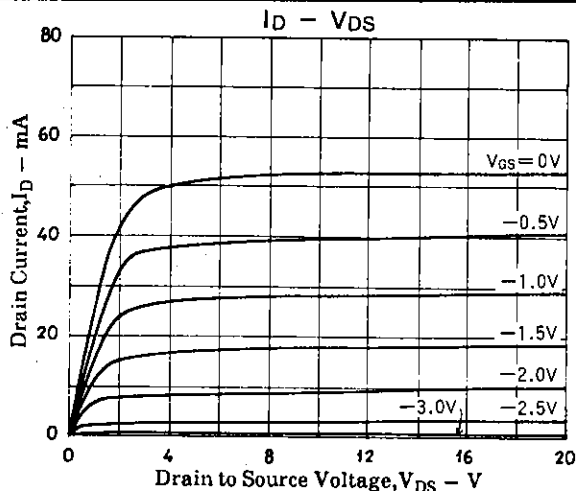
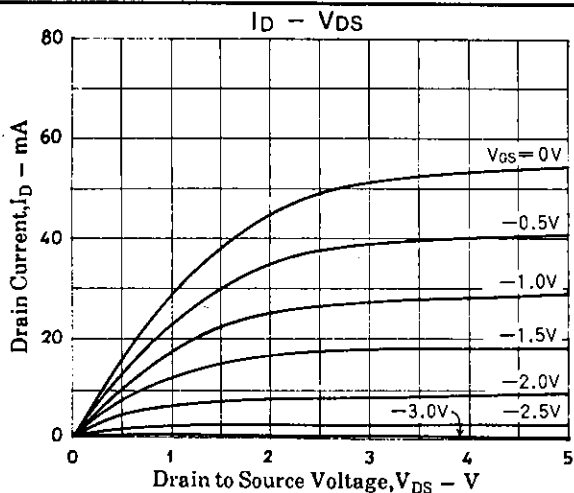
			min	typ	max	unit
Gate to Drain Breakdown Voltage	$V_{(BR)GDS}$	$I_G = -10\mu A, V_{DS} = 0$	-40			V
Gate Cutoff Current	I_{GSS}	$V_{GS} = -20V, V_{DS} = 0$			-1.0	nA
Cutoff Voltage	$V_{GS(OFF)}$	$V_{DS} = 10V, I_D = 100\mu A$	-2.0	-3.0	-5.0	V
Drain Current	I_{DSS}	$V_{DS} = 10V, V_{GS} = 0$	40*		75*	mA
Forward Transfer Admittance	$ y_{fs} (1)$	$V_{DS} = 10V, I_D = 10mA, f = 1kHz$	10	15		mS
		$V_{DS} = 10V, V_{GS} = 0, f = 1kHz$	22	30		mS
Input Capacitance	c_{iss}	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		11		pF
Reverse Transfer Capacitance	c_{rss}	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		2.5		pF
Noise Figure	NF	$V_{DS} = 10V, R_g = 1k\Omega, I_D = 1mA, f = 1kHz$	1.5			dB

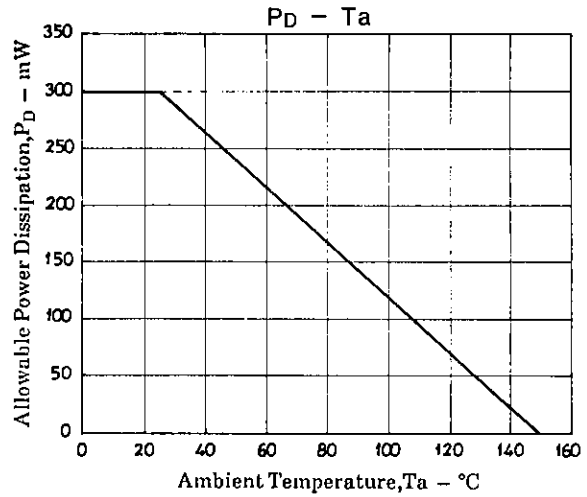
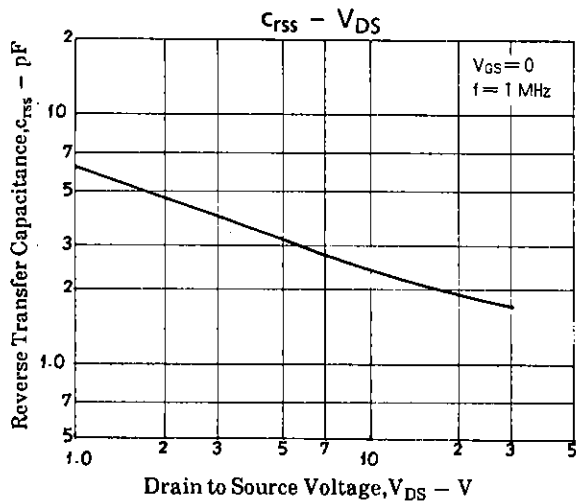
* : The 2SK937 is classified by I_{DSS} as follows (unit : mA) :

40	Y3	52	48	Y4	63	57	Y5	75
----	----	----	----	----	----	----	----	----

Package Dimensions 2019A
(unit: mm)







- 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.