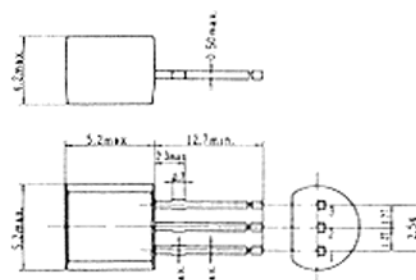


2SK435

SILICON N-CHANNEL JUNCTION FET
 LOW FREQUENCY / HIGH FREQUENCY
 AMPLIFIER

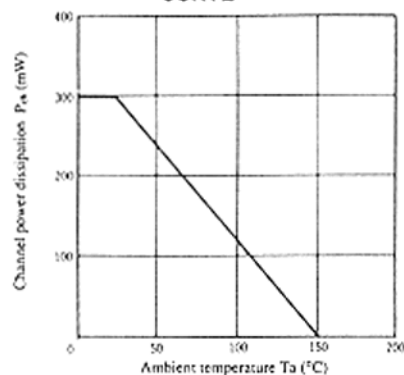


(JEDEC TO-92)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SK435	Unit
Drain to source voltage	V_{DS}	22	V
Gate to source voltage	V_{GS0}	-22	V
Drain current	I_D	100	mA
Gate current	I_G	10	mA
Channel power dissipation	P_{ch}	300	mW
Channel temperature	T_{ch}	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

MAXIMUM CHANNEL DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

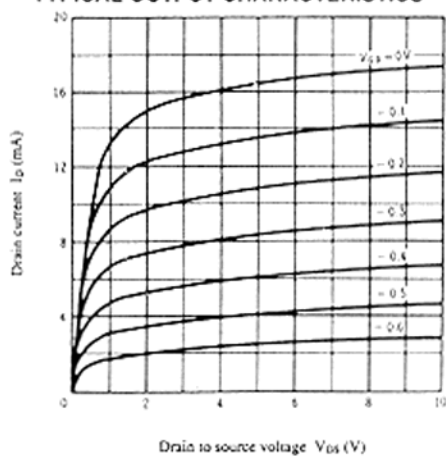
Item	Symbol	Test Condition	min.	typ.	max.	Unit
Gate to source breakdown voltage	$V_{(BR)GSS}$	$I_G = -10\mu A, V_{DS} = 0$	-22	—	—	V
Gate cutoff current	I_{GSS}	$V_{GS} = -15V, V_{DS} = 0$	—	—	-10	nA
Gate to source cutoff voltage	$V_{GS(off)}$	$V_{DS} = 5V, I_D = 10\mu A$	—	—	-2.5	V
Drain current	I_{DSS}^*	$V_{DS} = 5V, V_{GS} = 0, \text{Pulse Test}$	6	—	40	mA
Forward transfer admittance	$ y_{fs} $	$V_{DS} = 5V, I_D = 10mA, f = 1kHz$	20	—	—	mS
Input capacitance	C_{iss}	$V_{DS} = 5V, V_{GS} = 0, f = 1MHz$	—	9.0	11.0	pF
Reverse transfer capacitance	C_{rss}	$V_{DS} = 5V, V_{GS} = 0, f = 1MHz$	—	2.8	4.0	pF
Noise figure	NF	$V_{DS} = 5V, I_D = 1mA, f = 1kHz, R_f = 1k\Omega$	—	0.5	3.0	dB

* The 2SK435 is grouped by I_{DSS} as follows.

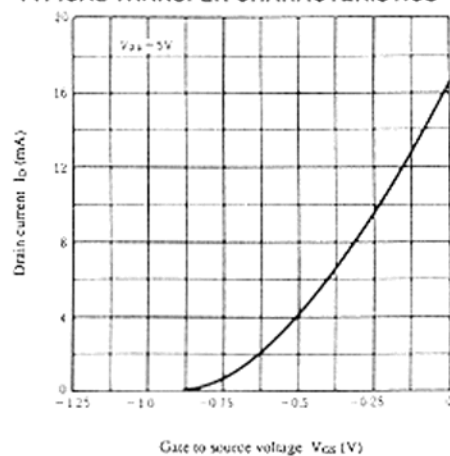
B	C	D	E
6 to 14	12 to 22	18 to 30	26 to 40

2SK435

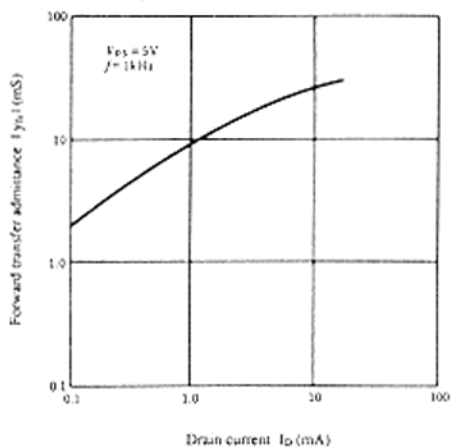
TYPICAL OUTPUT CHARACTERISTICS



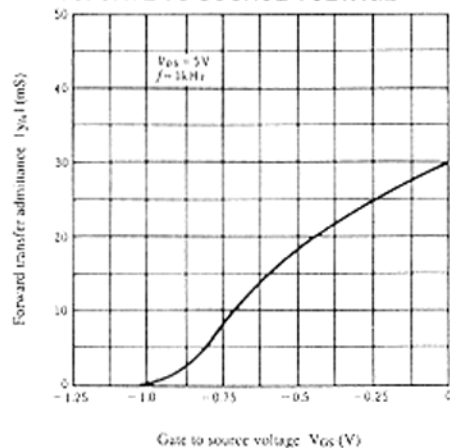
TYPICAL TRANSFER CHARACTERISTICS



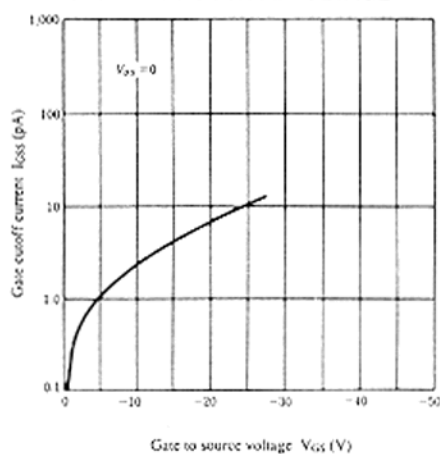
FORWARD TRANSFER ADMITTANCE VS. DRAIN CURRENT



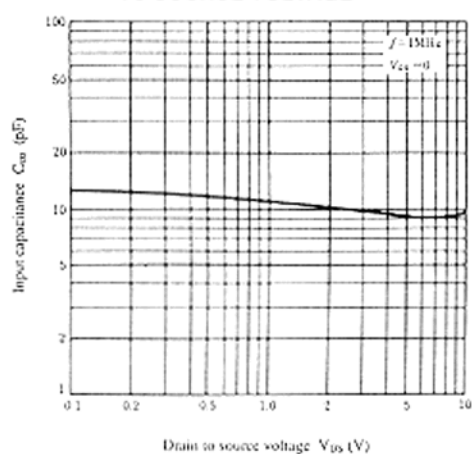
FORWARD TRANSFER ADMITTANCE VS. GATE TO SOURCE VOLTAGE



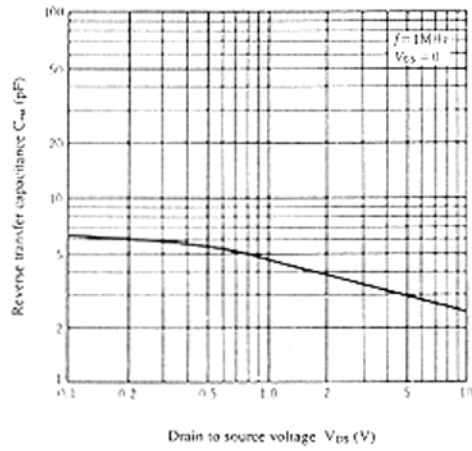
GATE TO SOURCE CUTOFF CURRENT VS. GATE TO SOURCE VOLTAGE



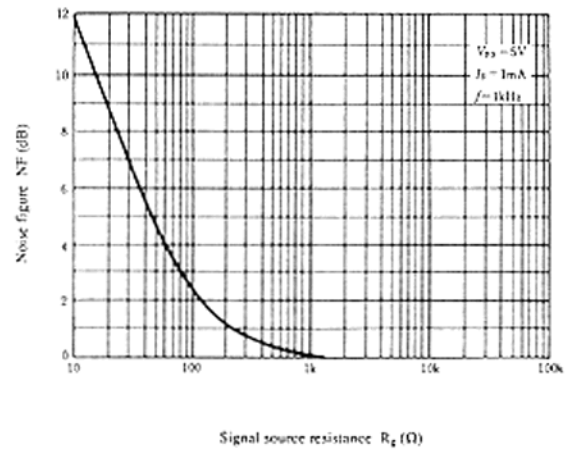
INPUT CAPACITANCE VS. DRAIN TO SOURCE VOLTAGE



**REVERSE TRANSFER CAPACITANCE
VS. DRAIN TO SOURCE VOLTAGE**



**NOISE FIGURE VS. SIGNAL SOURCE
RESISTANCE**



NOISE FIGURE VS. FREQUENCY

