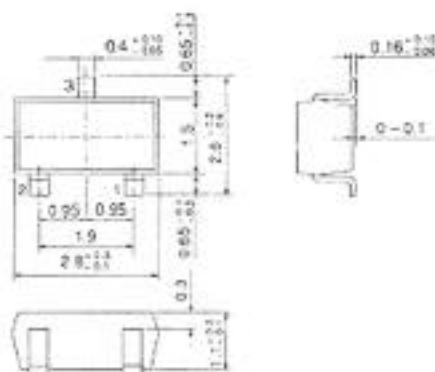


2SK217

SILICON N-CHANNEL JUNCTION FET

VHF AMPLIFIER

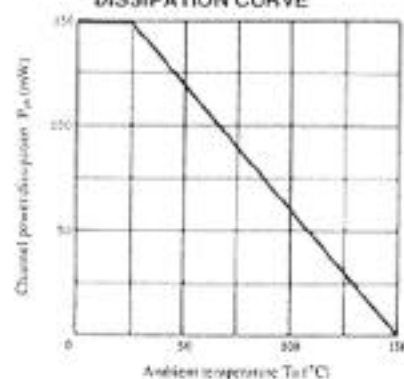


(MPAK)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SK217	Unit
Gate to drain current	V_{GD0}	-30	V
Drain current	I_D	20	mA
Gate current	I_G	10	mA
Channel power dissipation	P_{ch}	150	mW
Channel temperature	T_{ch}	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

MAXIMUM CHANNEL POWER DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

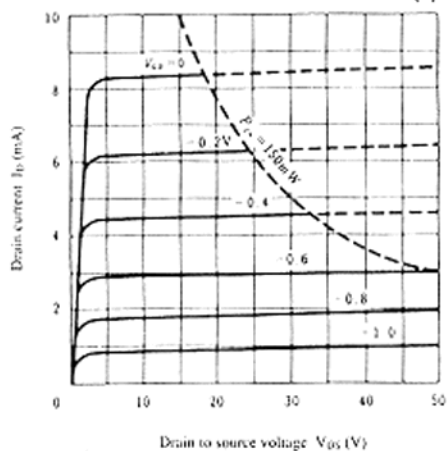
Item	Symbol	Test Condition	min.	typ.	max.	Unit
Gate to drain breakdown voltage	$V_{BDS}(I_D)$	$I_D = -100\mu A$	-30	—	—	V
Gate cutoff current	I_{GS}	$V_{DS} = -0.5V, V_{GS} = 0$	—	—	-10	μA
Gate to source cutoff voltage	$V_{GSO}(I_D)$	$V_{DS} = 5V, I_D = 10\mu A$	—	—	-2.5	V
Drain current	I_{DS}^*	$V_{DS} = 5V, V_{GS} = 0$	2.5	—	12	mA
Forward transfer admittance	$ y_{fs} $	$V_{DS} = 5V, V_{GS} = 0, f = 1kHz$	—	8.0	—	mS
Reverse transfer capacitance	C_{rs}	$V_{DS} = 5V, V_{GS} = 0, f = 1MHz$	—	0.1	—	pF

* The 2SK217 is grouped by I_{DS} as follows.

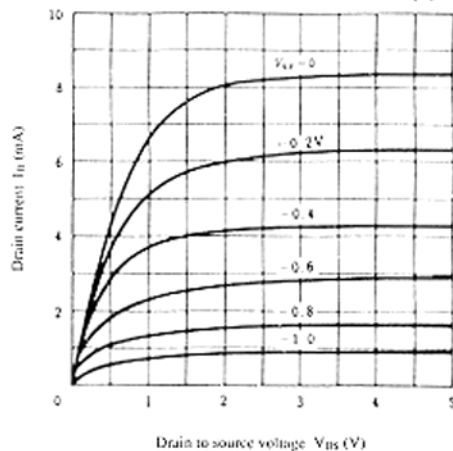
Grade	C	D	F
Mark	2C	2D	2F
I_{DS}	2.5 to 5	4 to 8	6 to 12

2SK217

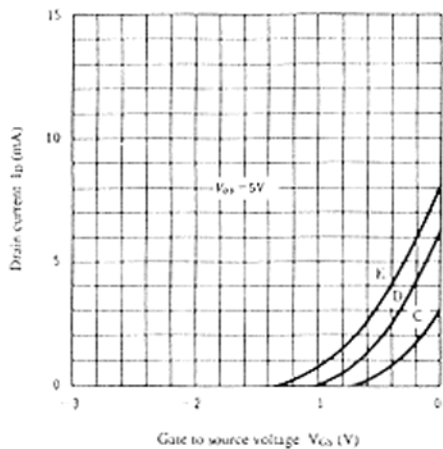
TYPICAL OUTPUT CHARACTERISTICS(1)



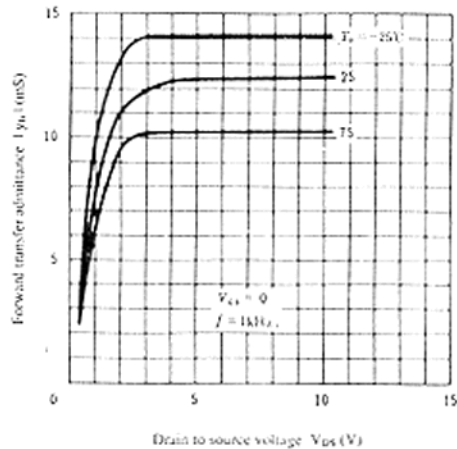
TYPICAL OUTPUT CHARACTERISTICS(2)



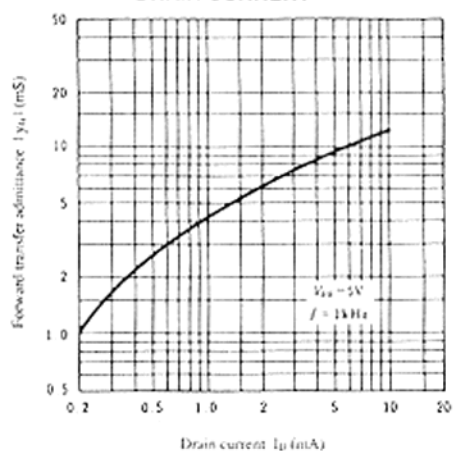
TYPICAL TRANSFER CHARACTERISTICS



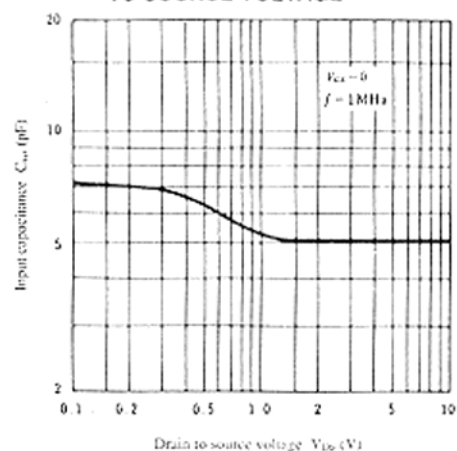
FORWARD TRANSFER ADMITTANCE VS. DRAIN TO SOURCE VOLTAGE



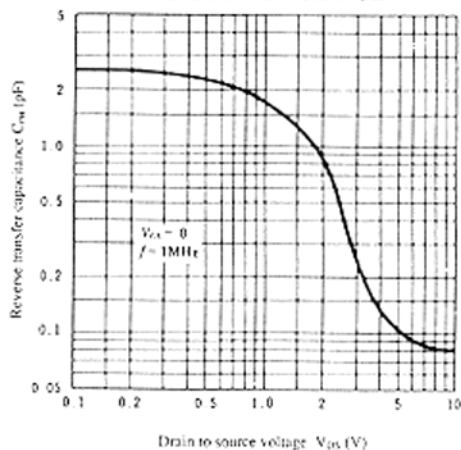
FORWARD TRANSFER ADMITTANCE VS. DRAIN CURRENT



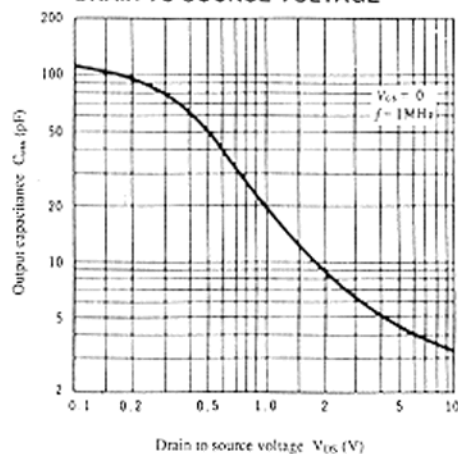
INPUT CAPACITANCE VS. DRAIN TO SOURCE VOLTAGE



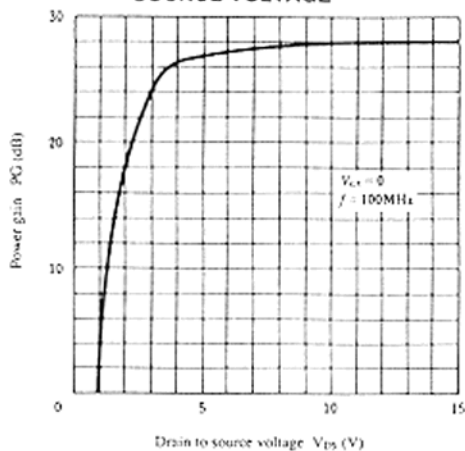
REVERSE TRANSFER CAPACITANCE VS. DRAIN TO SOURCE VOLTAGE



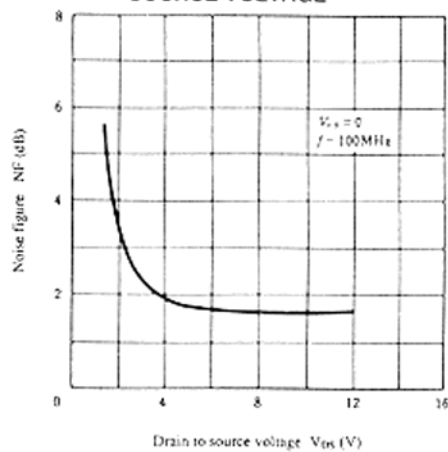
OUTPUT CAPACITANCE VS. DRAIN TO SOURCE VOLTAGE



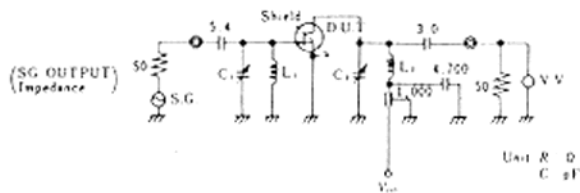
POWER GAIN VS. DRAIN TO SOURCE VOLTAGE



NOISE FIGURE VS. DRAIN TO SOURCE VOLTAGE



POWER GAIN AND NOISE FIGURE TEST CIRCUIT



- C_1, C_2 : 0 to 30pF Variable Air
- L_1 : 3.5T ϕ 1mm Copper Ribbon, Tin plated 10mm inside dia.
- L_2 : 4.5T ϕ 1mm Copper Ribbon, Tin plated 10mm inside dia.