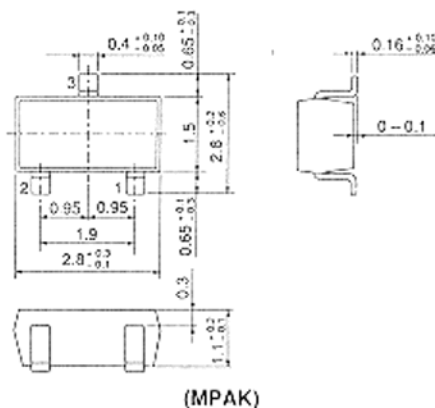


2SK980

SILICON N-CHANNEL JUNCTION FET
VIDEO FREQUENCY LOW NOISE AMPLIFIER



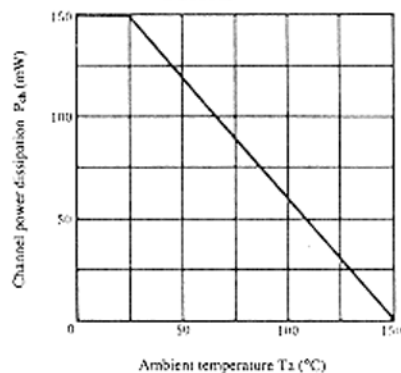
(MPAK)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SK980	Unit
Drain to source voltage	V_{DSX}^*	12	V
Gate to source voltage	V_{GSS}	-15	V
Drain current	I_D	40	mA
Gate current	I_G	± 1	mA
Channel power dissipation	P_{ch}	150	mW
Channel temperature	T_{ch}	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

* at $V_{GS} = -3V$

MAXIMUM CHANNEL DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

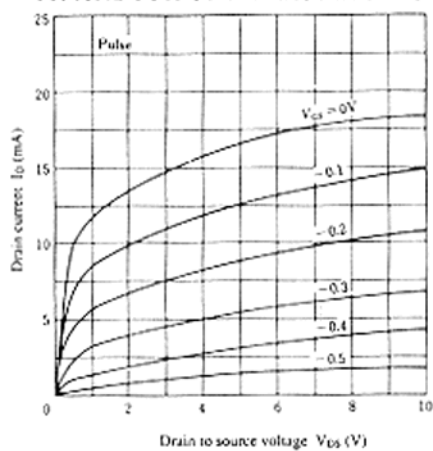
Item	Symbol	Test Condition	min.	typ.	max.	Unit
Drain to source cutoff current	I_{DSX}	$V_{DS} = 12V, V_{GS} = -3V$	—	—	-100	μA
Gate cutoff current	I_{GSS}	$V_{GS} = -7V, V_{DS} = 0$	—	—	-10	nA
Gate to source breakdown voltage	$V_{(BR)GSS}$	$I_G = -100\mu A, V_{DS} = 0$	-15	—	—	V
Drain current	I_{DSS}^*	$V_{DS} = 5V, V_{GS} = 0, \text{Pulse Test}$	8	—	32	mA
Gate to source cutoff voltage	$V_{GS(off)}$	$V_{DS} = 5V, I_D = 1\mu A$	-0.1	—	-2.5	V
Forward transfer admittance	$ y_{fs} $	$V_{DS} = 5V, I_D = 8mA, f = 1kHz$	28	33	—	mS
Input capacitance	C_{iss}	$V_{DS} = 5V, I_D = 8mA, f = 1MHz$	—	4	5	pF
Output noise voltage	V_N	See Test Circuit	—	—	20	mV

* The 2SK980 is grouped by I_{DSS} as follows.

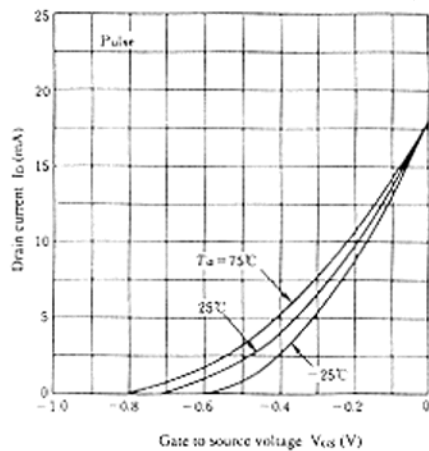
Grade	F	G
Mark	XAF	XAG
$I_{DSS(max)}$	8 to 20	16 to 32

2SK980

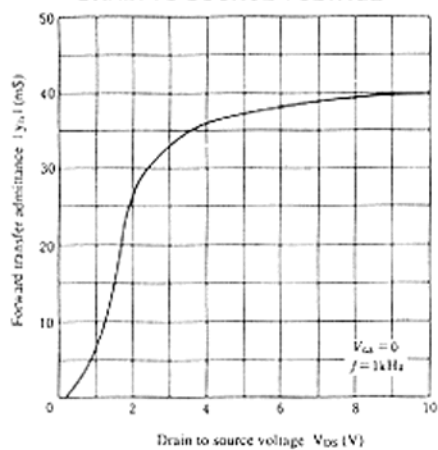
TYPICAL OUTPUT CHARACTERISTICS



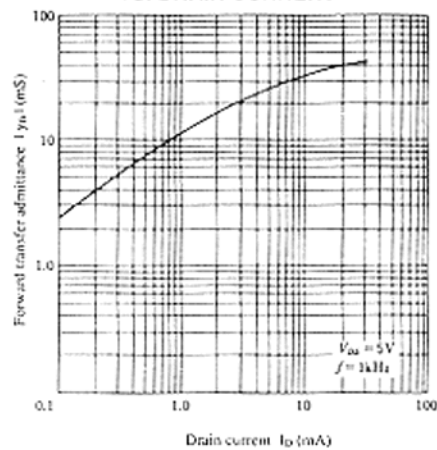
TYPICAL TRANSFER CHARACTERISTICS



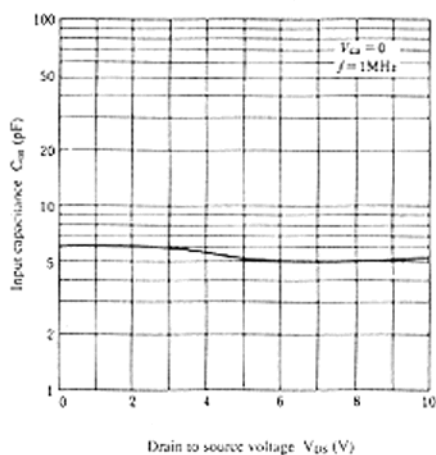
FORWARD TRANSFER ADMITTANCE VS. DRAIN TO SOURCE VOLTAGE



FORWARD TRANSFER ADMITTANCE VS. DRAIN CURRENT



INPUT CAPACITANCE VS. DRAIN TO SOURCE VOLTAGE



INPUT CAPACITANCE VS. DRAIN CURRENT

