

KSK117

SILICON N-CHANNEL JUNCTION FET

T-29-25

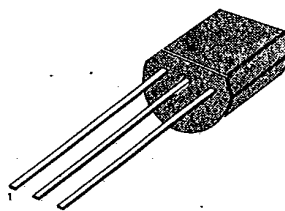
LOW FREQUENCY LOW NOISE AMP.

High $|Y_{fs}|$: 15mS (TYP)
 High Input Impedance: $I_{gss} = -1nA$
 Low Noise, NF = 1dB (TYP)

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ C$)

Characteristic	Symbol	Rating	Unit
Gate-Drain Voltage	V_{gds}	-50	V
Gate Current	I_g	10	mA
Collector Dissipation	P_c	300	mW
Junction Temperature	T_j	125	$^\circ C$
Storage Temperature	T_{stg}	-55~125	$^\circ C$

TO-92



1. Drain 2. Source 3. Gate

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Gate-Drain Breakdown Voltage	BV_{gds}	$V_{gs}=0, I_g = -100\mu A$	-50			V
Gate Leak Current	I_{gss}	$V_{gs} = -30V, V_{ds} = 0$			-1	nA
Drain Leak Current	I_{dss}	$V_{ds} = 10V, V_{gs} = 0$	0.6		14	mA
Gate-Source Voltage	$V_{gs(off)}$	$V_{ds} = 10V, I_b = 0.1\mu A$	-0.2		-1.5	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{ds} = 10V, V_{gs} = 0, f = 1KHz$	4.0	15		mS
Input Capacitance	C_{iss}	$V_{ds} = 10V, V_{gs} = 0, f = 1MHz$		13		pF
Feedback Capacitance	C_{rss}	$V_{gd} = 10V, I_b = 0$ $f = 1MHz$		3		pF
Noise Figure	NF1	$V_{ds} = 10V, R_g = 1k\Omega$ $I_b = 0.5mA, f = 10Hz$		5	10	dB
	NF2	$V_{ds} = 10V, R_g = 1k\Omega$ $I_b = 0.5mA, f = 1KHz$		1	2	dB

 I_{dss} CLASSIFICATION

Classification	Y	G	L
$I_{dss}(mA)$	1.2-3.0	2.6-6.5	6.0-14

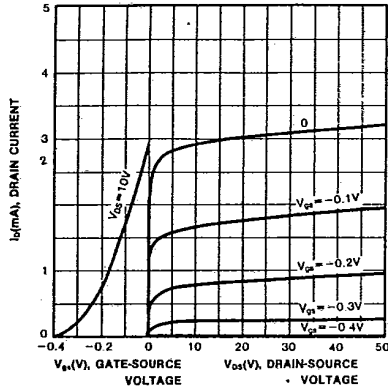


KSK117

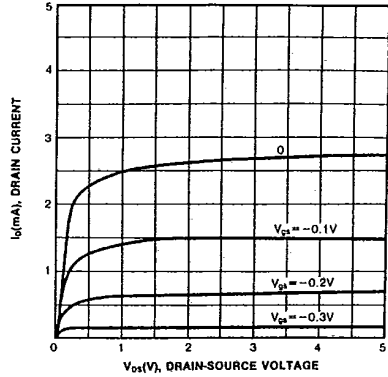
SILICON N-CHANNEL JUNCTION FET

T-29-25

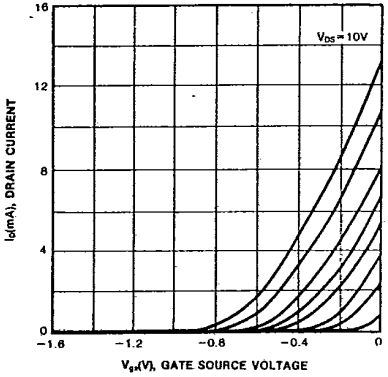
STATIC CHARACTERISTIC



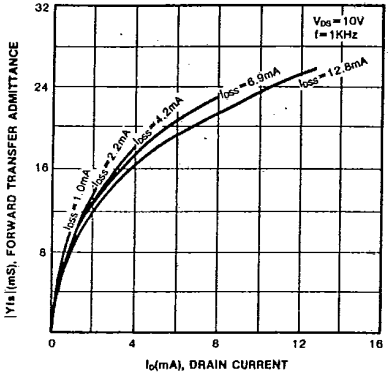
I_D - V_{DS}



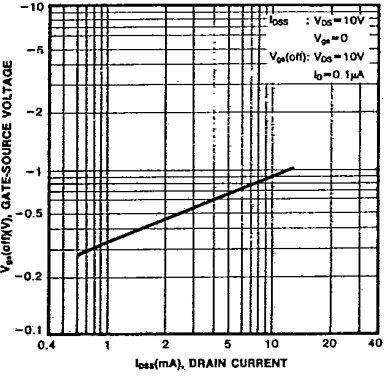
I_D - V_{GS}



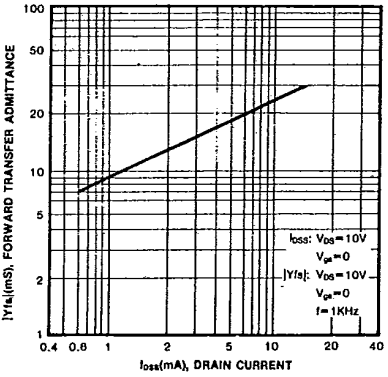
$|Y_{fs}|$ - I_D



$V_{GS}(off)$ - I_{loss}



$|Y_{fs}|$ - I_{loss}

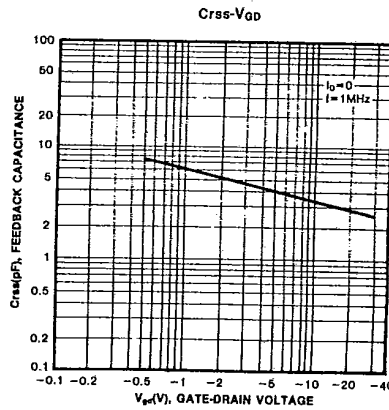
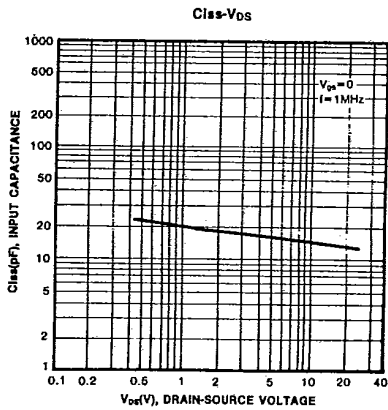
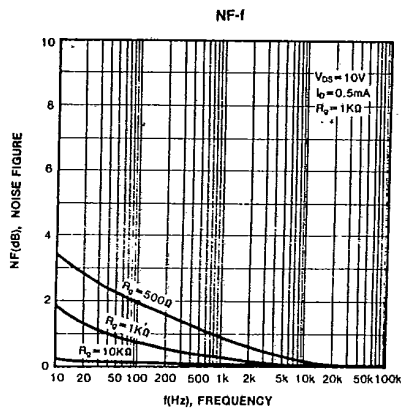
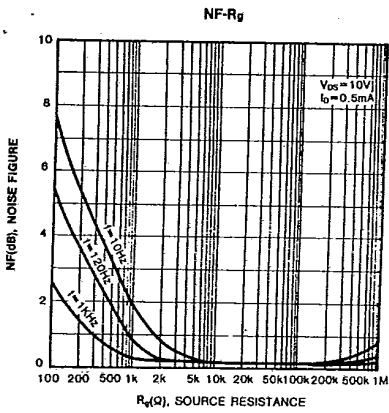
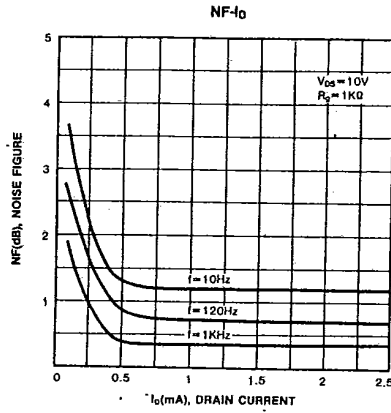
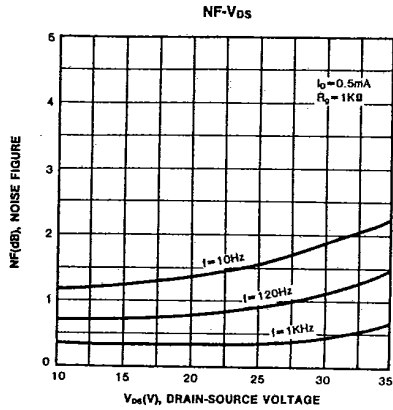


3

KSK117

SILICON N-CHANNEL JUNCTION FET

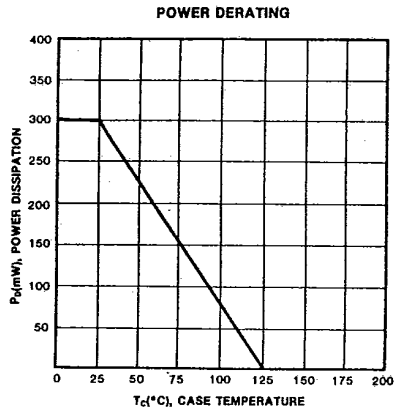
T-29-25



KSK117

SILICON N-CHANNEL JUNCTION FET

T-29-25



3