

KSK65**SI N-CHANNEL JUNCTION FET**

T-29-25

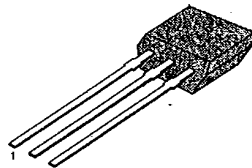
AF IMPEDANCE CONVERTER

- Built-In Diode Between G and S
- Low NV

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

Characteristic	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSO}	12	V
Gate-Drain Voltage	V_{GDO}	12	V
Drain-source Current	I_{DSO}	2	mA
Drain-Gate Current	I_{DGO}	2	mA
Gate-Source Current	I_{GSO}	2	mA
Power Dissipation	P_D	20	mW
Operate Temperature	T_{OPR}	$-10\sim+70$	$^\circ\text{C}$
Storage Temperature	T_{stg}	$-20\sim+80$	$^\circ\text{C}$

TO-92S



1. Source 2. Gate 3. Drain

3**ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)**

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Drain Current	I_{DSS}	$V_{DS}=4.5\text{V}$, $V_{GS}=0$, $R_S=2.2\text{k}\Omega \pm 1\%$	0.04		0.8	mA
Transconductance	g_m	$V_{DS}=4.5\text{V}$, $V_{GS}=0$, $R_S=2.2\text{k}\Omega \pm 1\%$, $f=1\text{kHz}$	300	500		μS
Noise Voltage	NV	$V_{DS}=4.5\text{V}$, $R_S=2.2\text{k}\Omega \pm 1\%$, $C_G=10\text{pF}$, A curve			4	μV
Voltage Gain	G_{v1}	$V_{DS}=4.5\text{V}$, $R_S=2.2\text{k}\Omega \pm 1\%$, $C_G=10\text{pF}$, $E_G=100\text{mV}$, $f=70\text{Hz}$		-10		dB
Voltage Gain	G_{v2}	$V_{DS}=12\text{V}$, $R_S=2.2\text{k}\Omega \pm 1\%$, $C_G=10\text{pF}$, $E_G=100\text{mV}$, $f=70\text{Hz}$		-9.5		dB
Voltage Gain	G_{v3}	$V_{DS}=1\text{V}$, $R_S=2.2\text{k}\Omega \pm 1\%$, $C_G=10\text{pF}$, $E_G=100\text{mV}$, $f=70\text{Hz}$		-11		dB

 I_{DSS} - G_v CLASSIFICATION

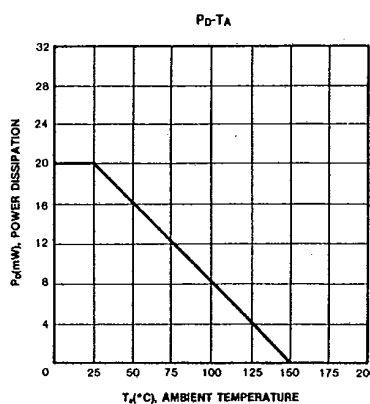
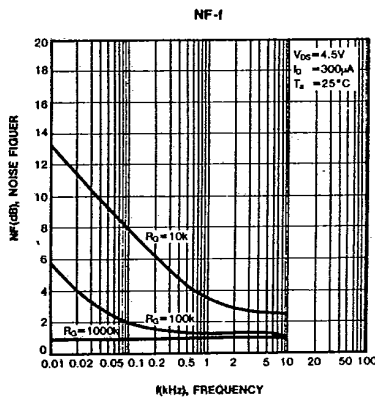
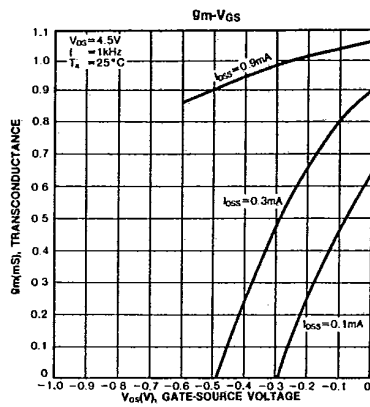
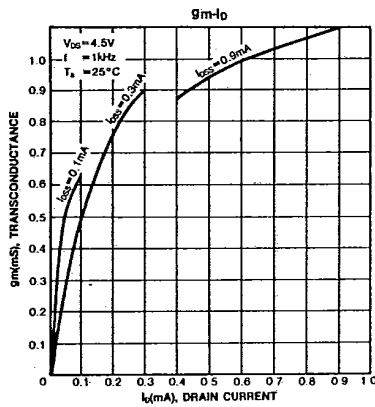
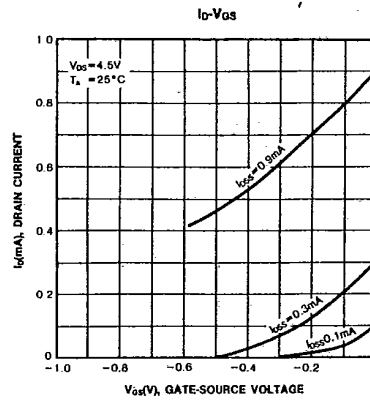
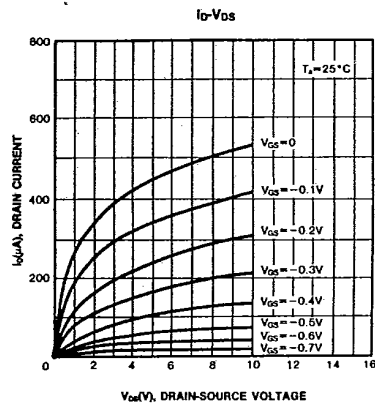
Classification	P	Q
I_{DSS} (mA)	0.04-0.2	0.15-0.8
G_{v1} (dB)	>-13	>-12
G_{v2} (dB)	>-12	>-11
$\Delta G_{v1}-G_{v2} $ (dB)	<3	<3
$\Delta G_{v1}-G_{v3} $ (dB)	<3	—



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