

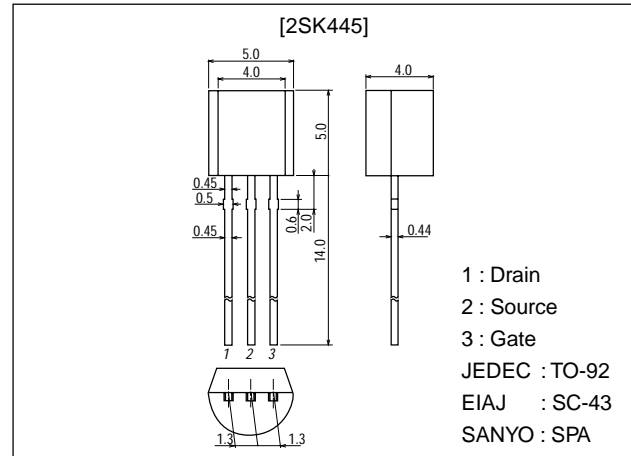
**2SK445****Video Camera 1st Stage Applications****Features**

- Large $|y_{fs}|$.
- Small Ciss.
- Ultralow noise figure.
- High frequency, low-frequency, low noise amplifier.

Package Dimensions

unit:mm

2005C

**Specifications****Absolute Maximum Ratings at Ta = 25°C**

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSS}		15	V
Gate-to-Drain Voltage	V_{GDS}		-15	V
Gate Current	I_G		10	mA
Drain Current	I_D		50	mA
Allowable Power Dissipation	P_D		300	mW
Junction Temperature	T_J		125	°C
Storage Temperature	T_{stg}		-55 to +125	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	$V_{(BR)GDS}$	$I_G = -10\mu A, V_{DS} = 0V$	-15			V
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = -10V, V_{DS} = 0V$			-1.0	nA
Zero-Gate Voltage Drain Current	I_{DSS}^*	$V_{DS} = 5V, V_{GS} = 0V$	5.0*		38.0*	mA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 5V, I_D = 100\mu A$		-0.9	-2.0	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = 5V, V_{GS} = 0V, f = 1kHz$	20	30		mS
Input Capacitance	Ciss	$V_{DS} = 5V, V_{GS} = 0V, f = 1MHz$		9.0		pF
Reverse Transfer Capacitance	Crss	$V_{DS} = 5V, V_{GS} = 0V, f = 1MHz$		2.8		pF
Noise Figure	NF	$V_{DS} = 5V, R_g = 1k\Omega, I_D = 1mA, f = 1kHz$		1.5		dB

* : The 2SK445 is classified by $V_{DS} = 5V$ as follows (unit : mA) :

5.0	F	12.0	10.0	G	24.0	16.0	H	38.0
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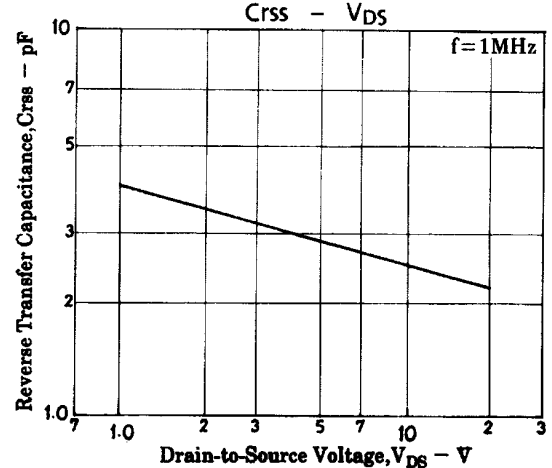
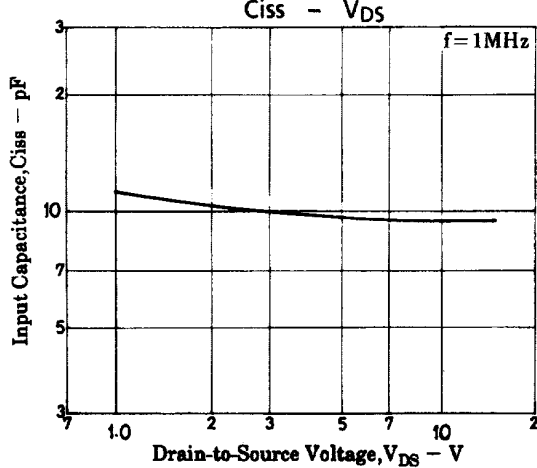
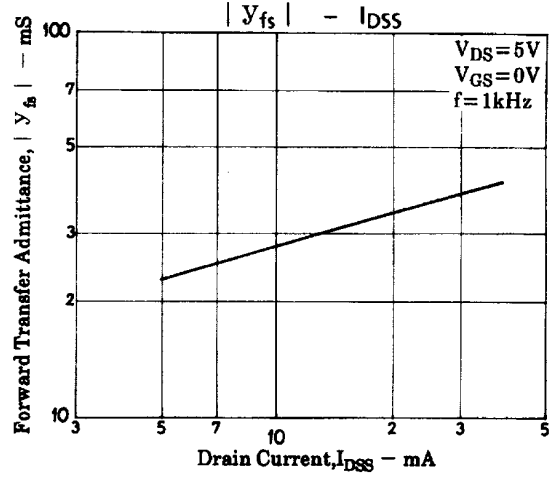
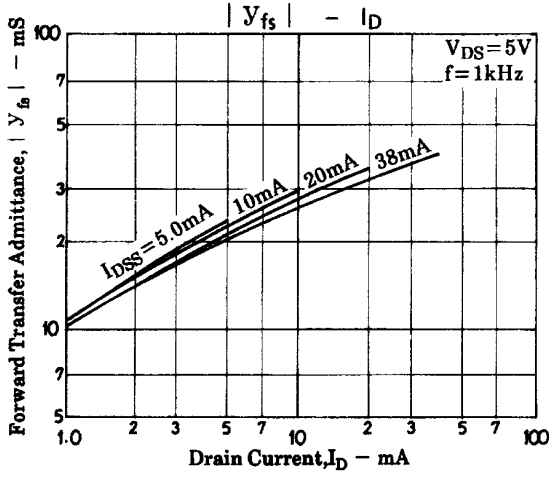
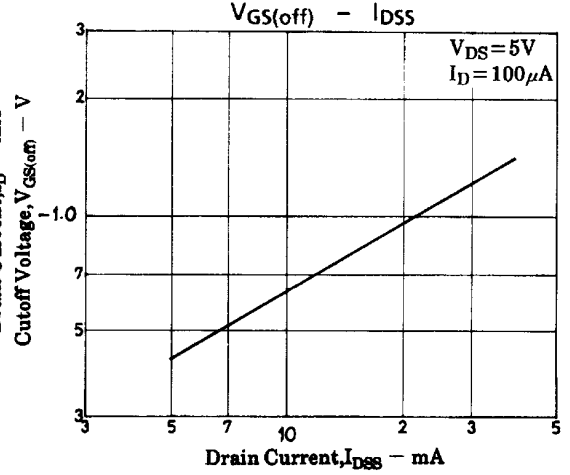
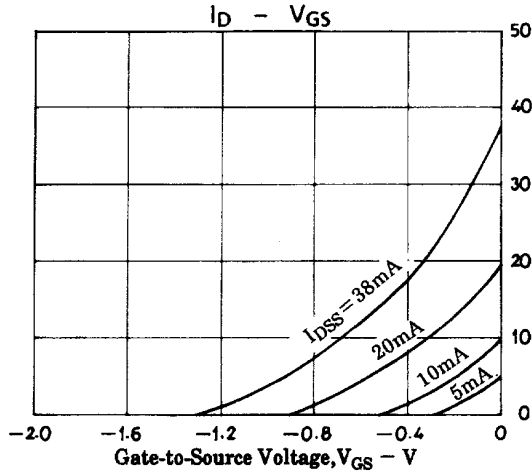
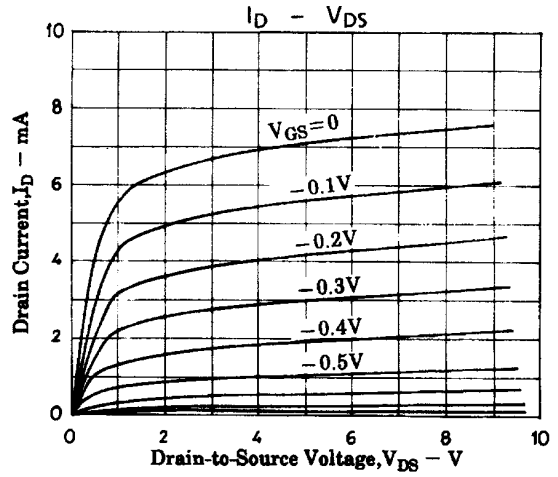
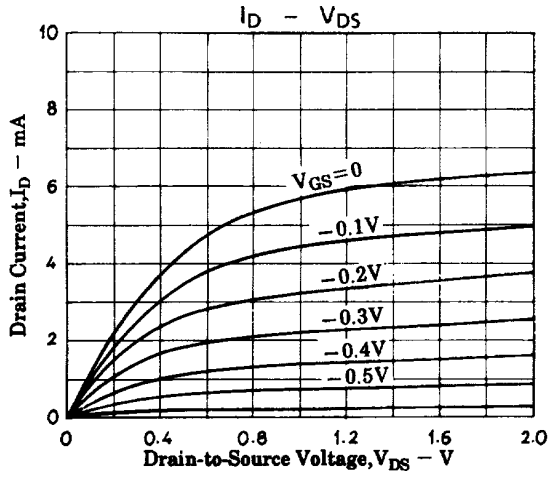
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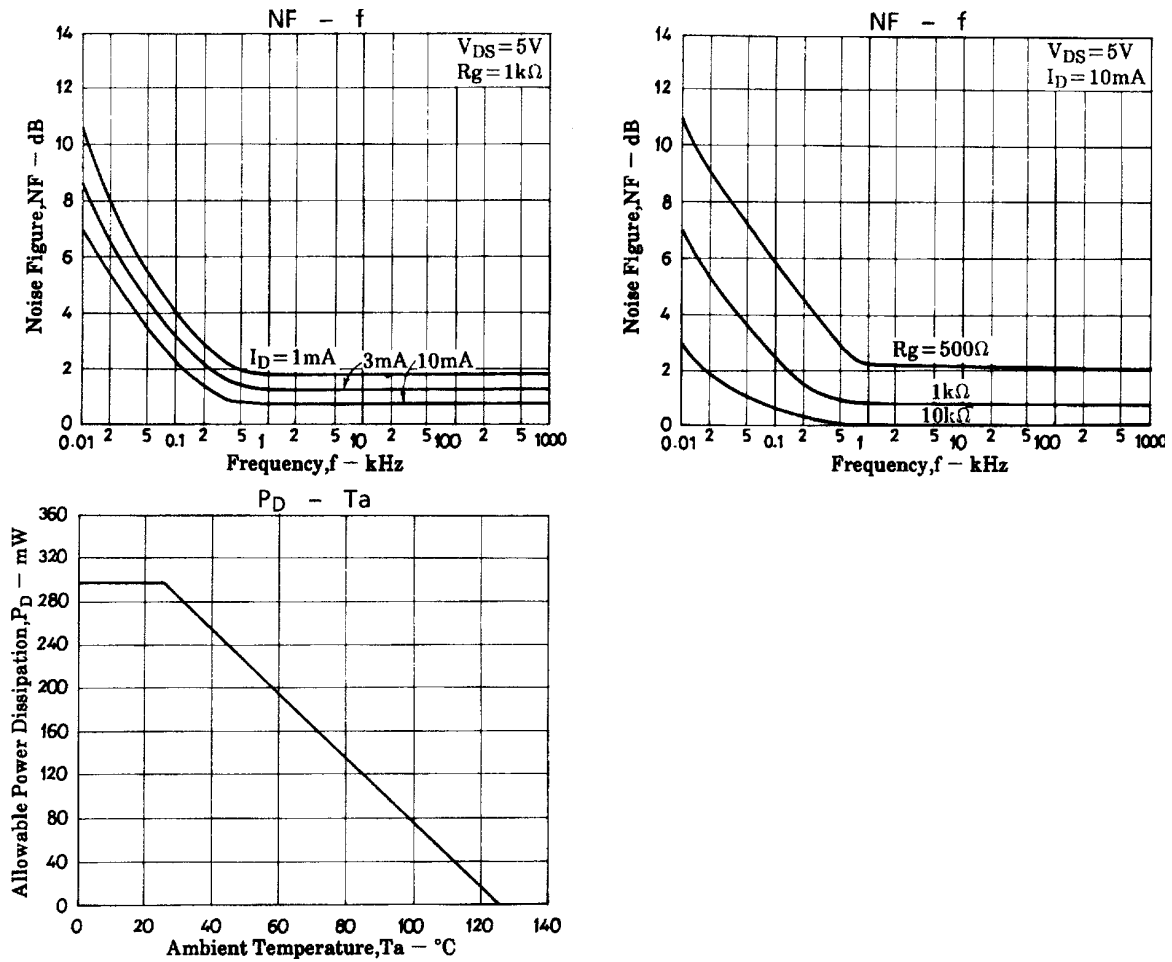
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