

**2SK443**

Video Camera First-Stage Applications

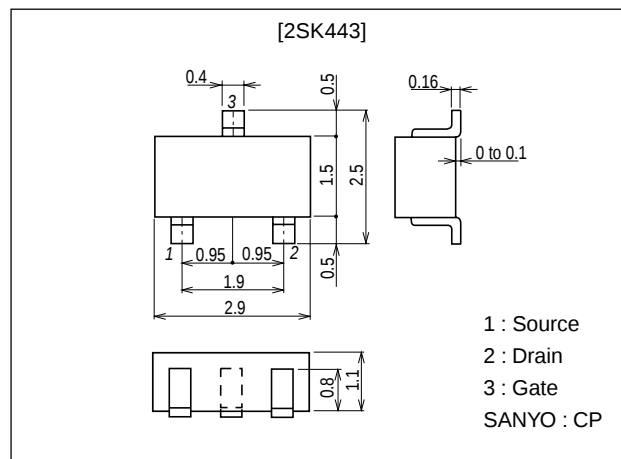
Features

- Large $|y_{fs}|$.
- Small C_{rss} .
- Ultralow noise figure.
- Ultrasmall-sized package permitting 2SK443-applied sets to be small-sized.

Package Dimensions

unit:mm

2050A



Specifications

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

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		200	mW
Junction Temperature	T_J		125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +125	$^\circ\text{C}$

Electrical Characteristics at $T_a = 25^\circ\text{C}$

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

* : The 2SK443 is classified by I_{DSS} as follows (unit : mA) :

(Note) Marking : AJ

 I_{DSS} rank : 5, 6, 7

5.0	5	12.0	10.0	6	24.0	16.0	7	38.0
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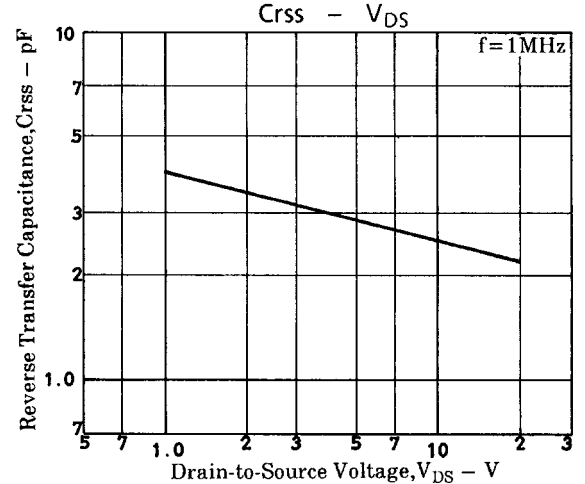
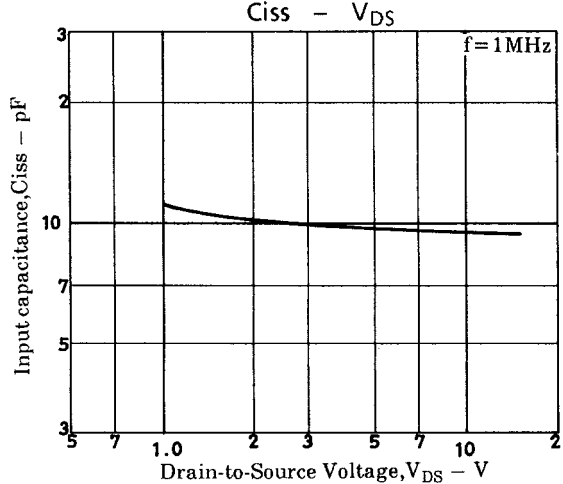
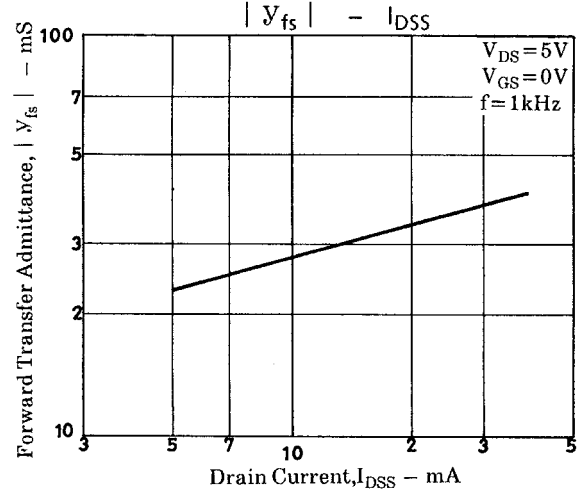
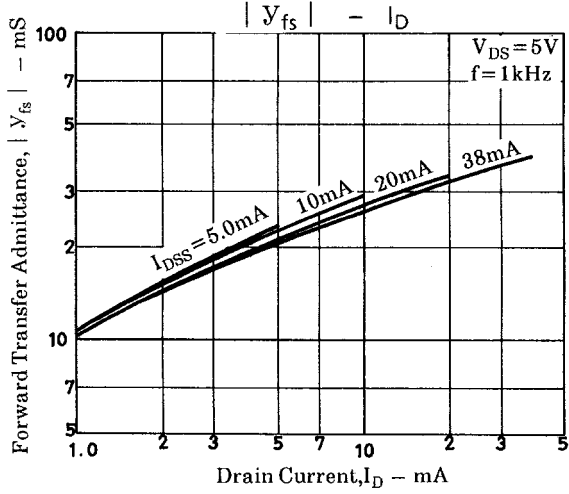
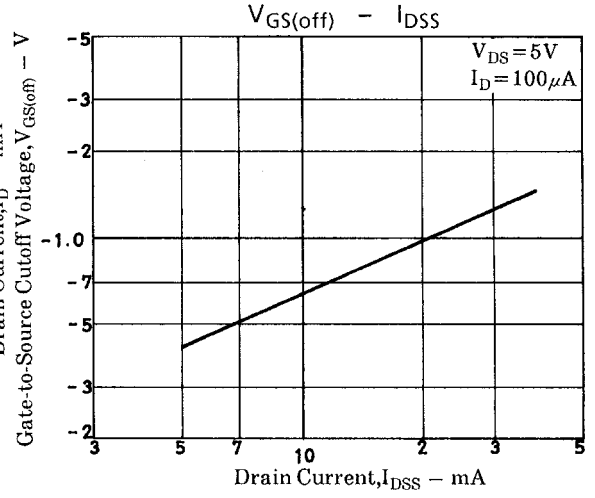
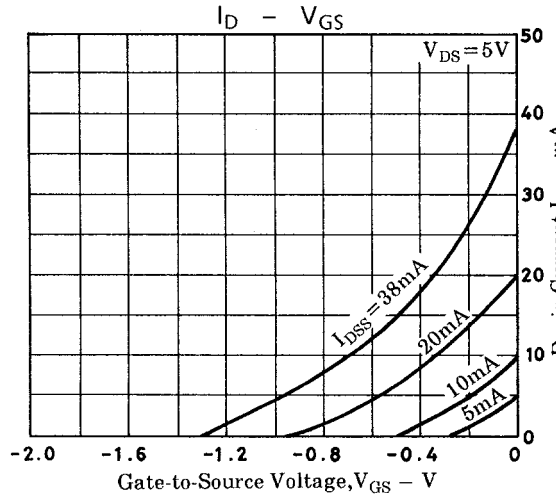
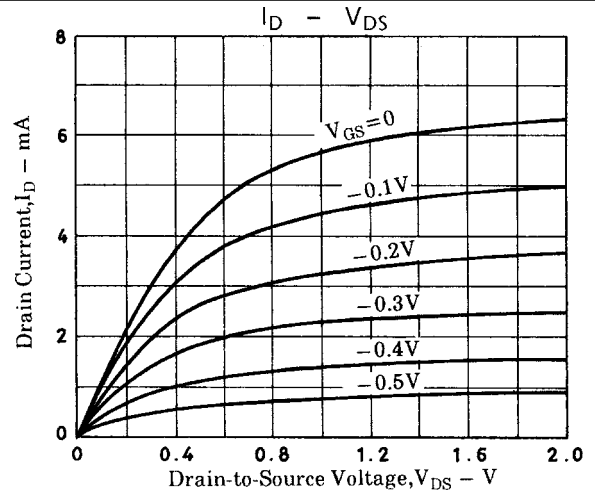
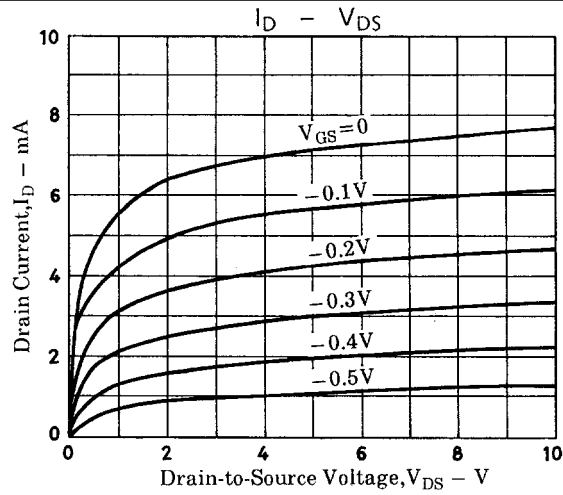
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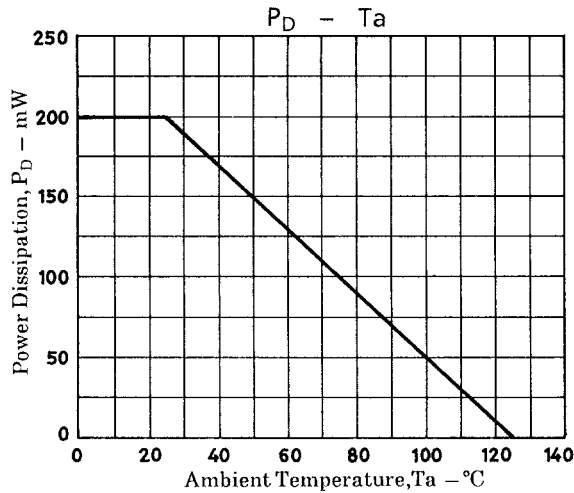
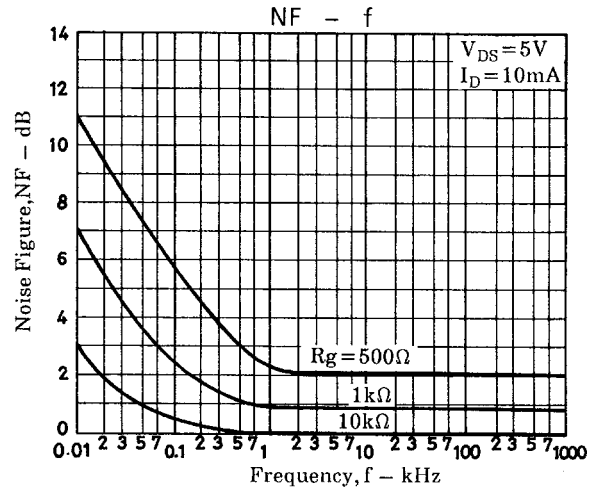
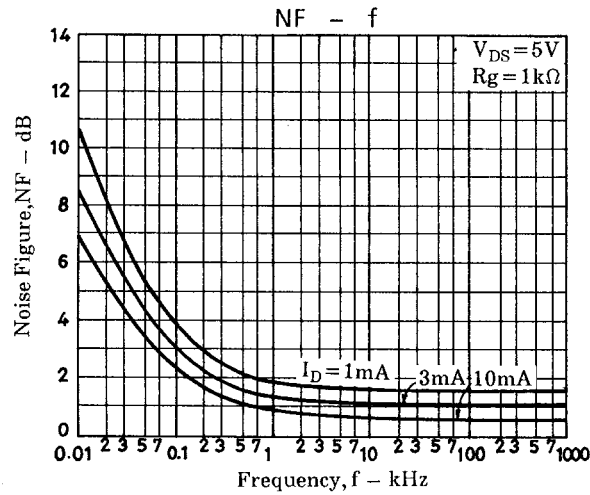
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