N-Channel Junction Silicon FET



2SK444

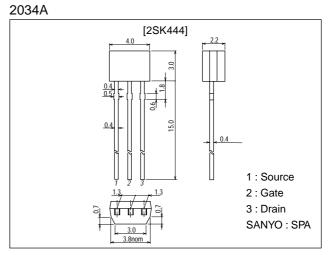
Video Camera Applications

Features

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

Package Dimensions

unit:mm



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	IG		10	mA
Drain Current	۱ _D		50	mA
Allowable Power Dissipation	PD		200	mW
Junction Temperature	Tj		125	°C
Storage Temperature	Tstg		-55 to +125	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
Falanetei			min	typ	max	Unit
Gate-to-Drain Breakdown Voltage	V(BR)GDS	I_{G} =-10 μ A, V_{DS} =0V	-15			V
Gate-to-Source Leakage Current	IGSS	V _{GS} =-10V, V _{DS} =0V			-1.0	nA
Zero-Gate Voltage Drain Current	IDSS*	V _{DS} =5V, V _{GS} =0V	5.0*		38.0*	mA
Cutoff Voltage	VGS(off)	V _{DS} =5V, I _D =100µA		-0.9	-2.0	V
Forward Transfer Admittance	yfs	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, Rg=1k Ω , I _D =1mA, f=1kHz		1.5		dB

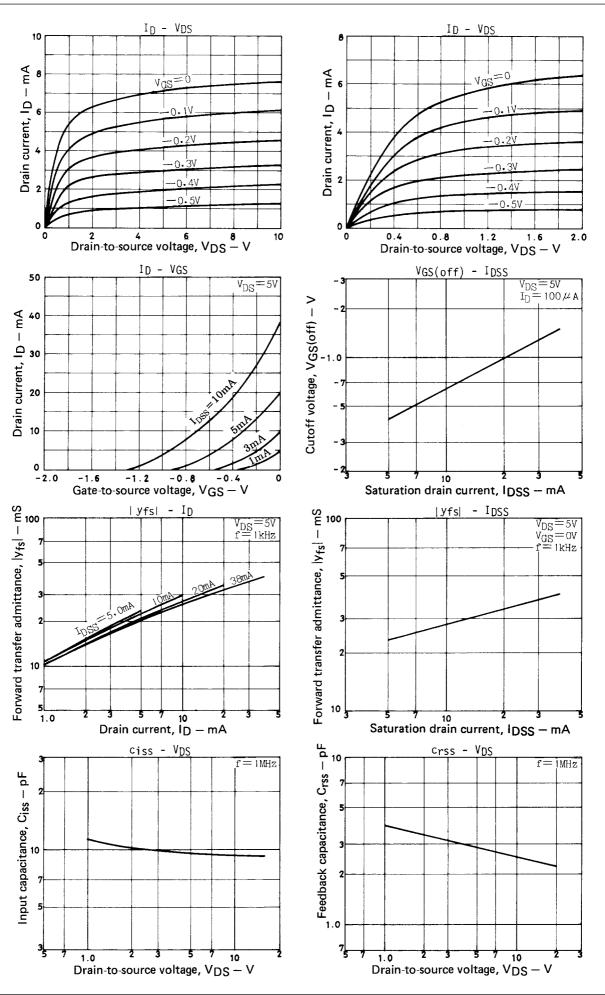
 \ast : The 2SK444 is classified by $V_{DS}{=}5V$ as follows (unit : mA) :

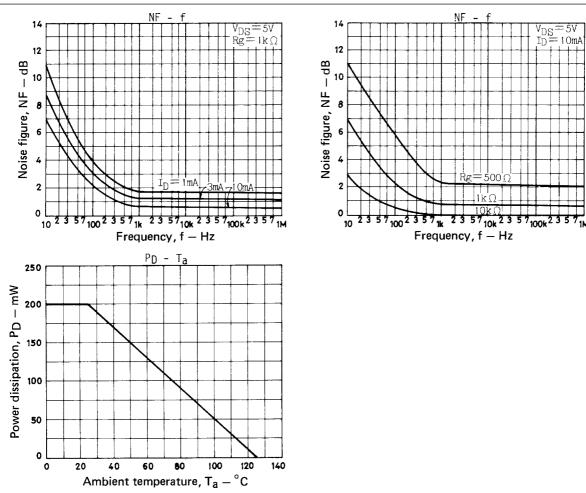
5.0 F 12.0 10.0 G 24.0 16.0 H 38.0

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