

SANYO	No.1420A	2SK444
		N-Channel Junction Silicon FET

Video Camera Applications

Features

- Large $|y_{fs}|$
- Small c_{iss}
- Very low noise figure
- High frequency, low noise amp

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

			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
Power dissipation	P_D	200	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

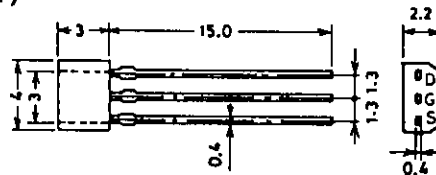
Electrical Characteristics/ $T_a = 25^\circ\text{C}$

			min	typ	max	unit
Gate to drain breakdown voltage	$V_{(BR)GDS}$	$I_G = -10\mu\text{A}, V_{DS} = 0\text{V}$	-15			V
Common source gate cutoff current	I_{GSS}	$V_{GS} = -10\text{V}, V_{DS} = 0\text{V}$			-1.0	nA
Gate to source cutoff voltage	$V_{GS(off)}$	$V_{DS} = 5\text{V}, I_D = 100\mu\text{A}$		-0.9	-2.0	V
Drain current (gate-source shorted)	I_{DSS}	$V_{DS} = 5\text{V}, V_{GS} = 0\text{V}$	5.0*		38.0*	mA
Forward transfer admittance	$ y_{fs} $	$V_{DS} = 5\text{V}, V_{GS} = 0\text{V}, f = 1\text{kHz}$	20	30		mS
Input capacitance	c_{iss}	$V_{DS} = 5\text{V}, V_{GS} = 0\text{V}, f = 1\text{MHz}$		9.0		pF
Feedback capacitance	c_{rss}	$V_{DS} = 5\text{V}, V_{GS} = 0\text{V}, f = 1\text{MHz}$		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 2SK444 is classified by $V_{DS} = 5\text{V}$ as follows (unit: mA):

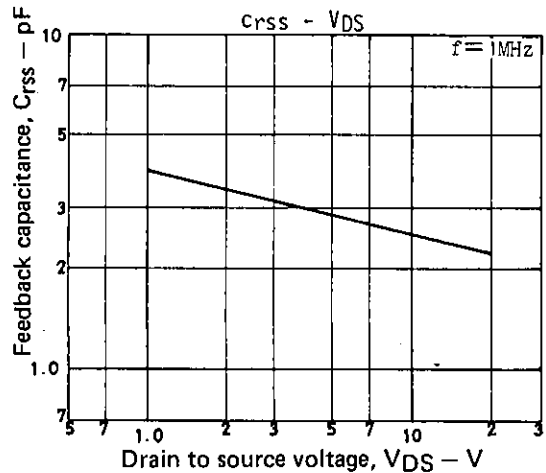
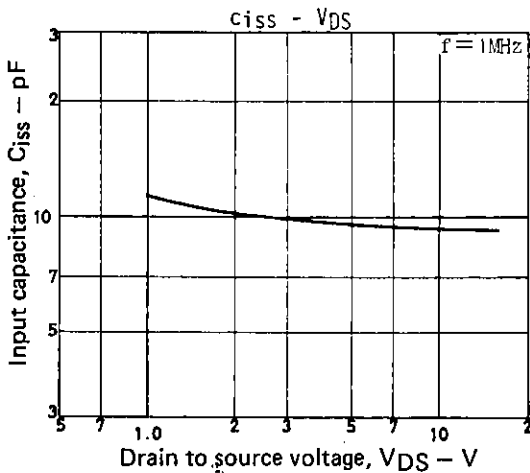
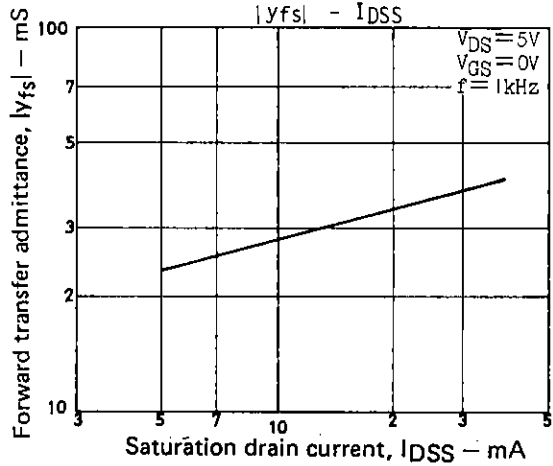
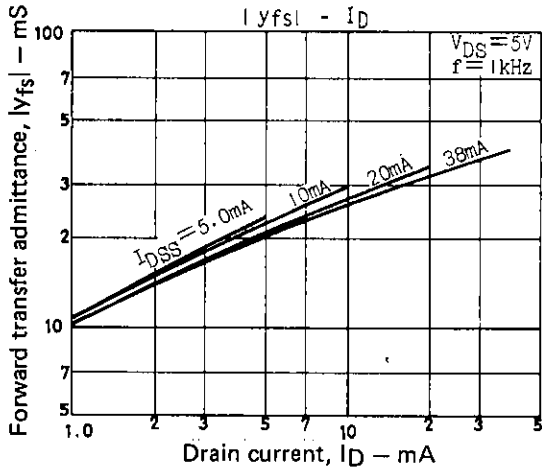
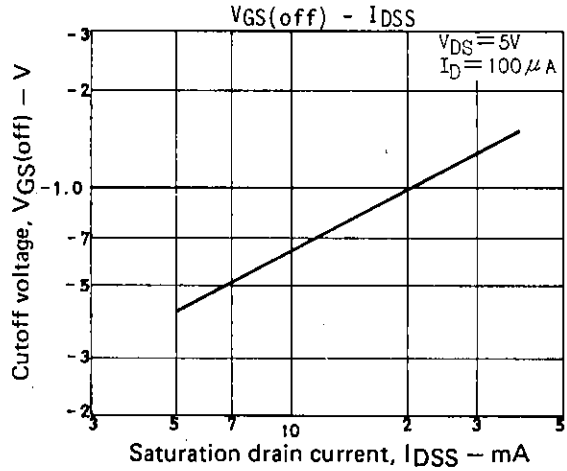
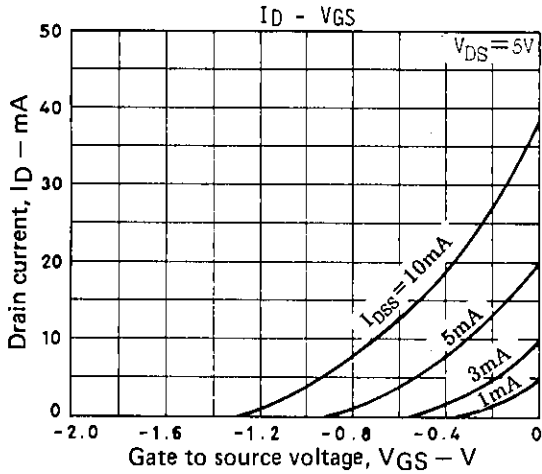
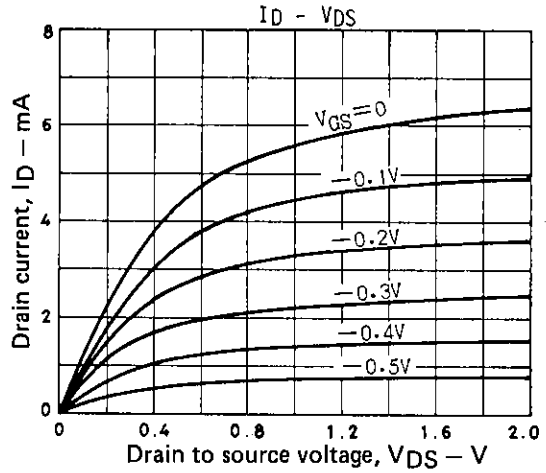
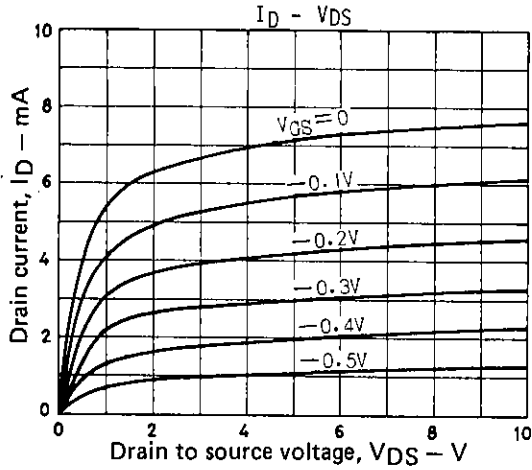
5.0	F	12.0	10.0	G	24.0	16.0	H	38.0
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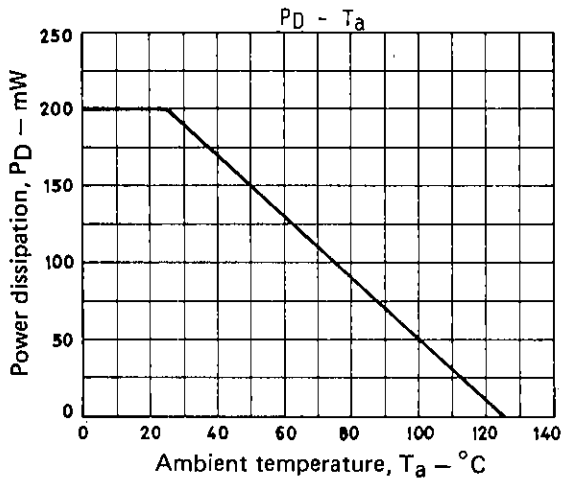
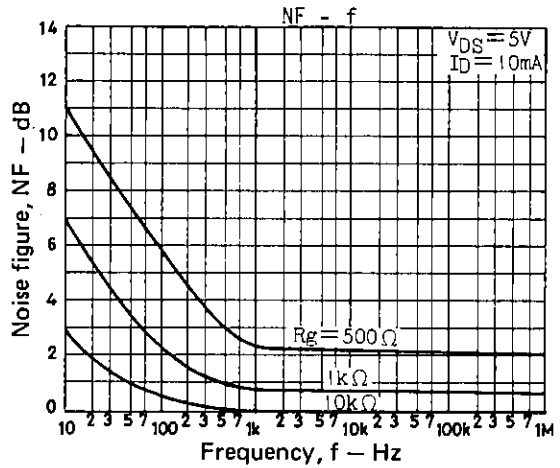
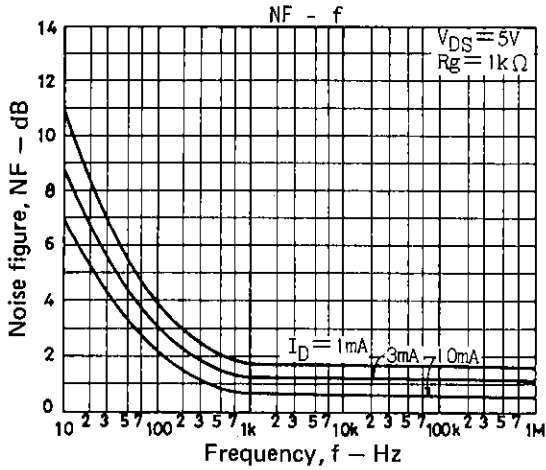
Package Dimensions 2034
(unit: mm)



D: Drain
G: Gate
S: Source

SANYO: SPA





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