

<b>SANYO</b>	No.1420A	<b>2SK444</b>
		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	$V_{DS}$	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	$^\circ\text{C}$

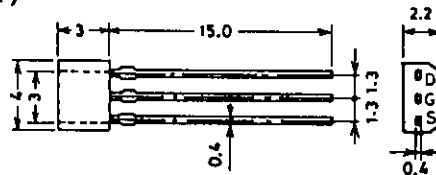
**Electrical Characteristics/ $T_a = 25^\circ\text{C}$**

			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):

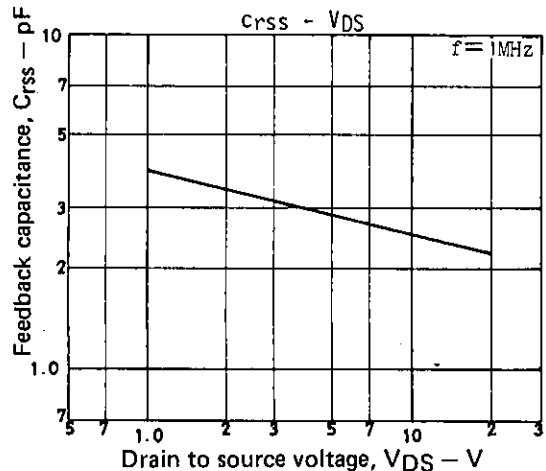
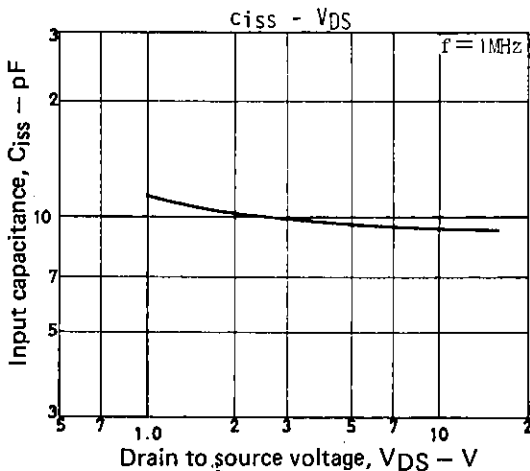
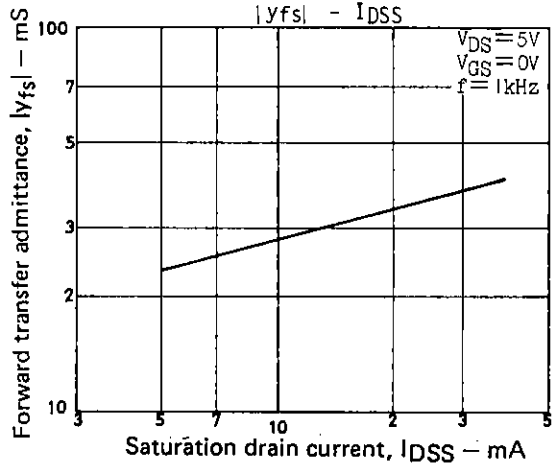
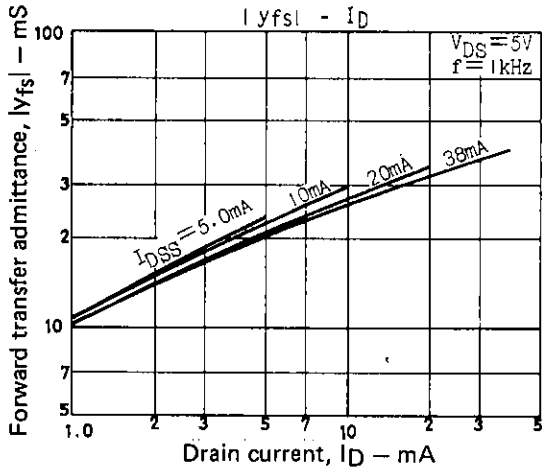
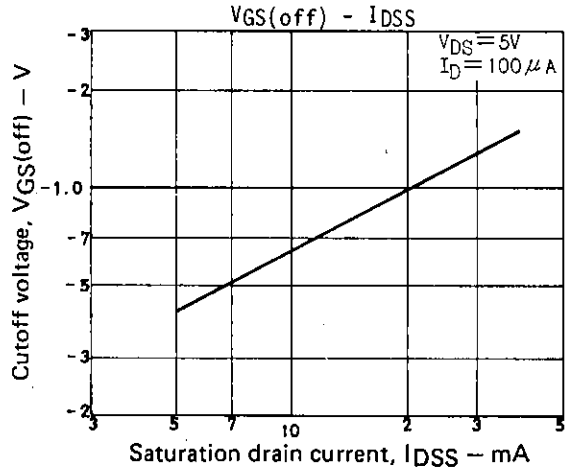
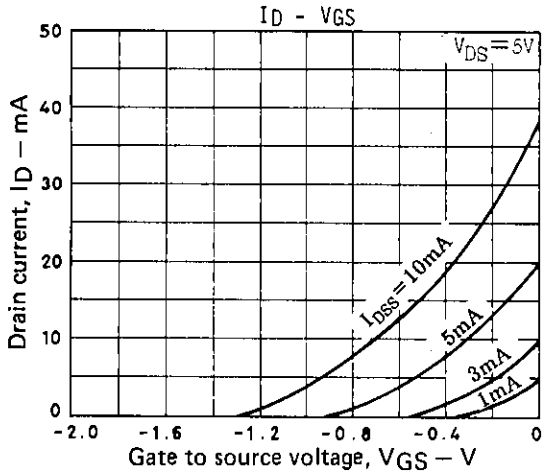
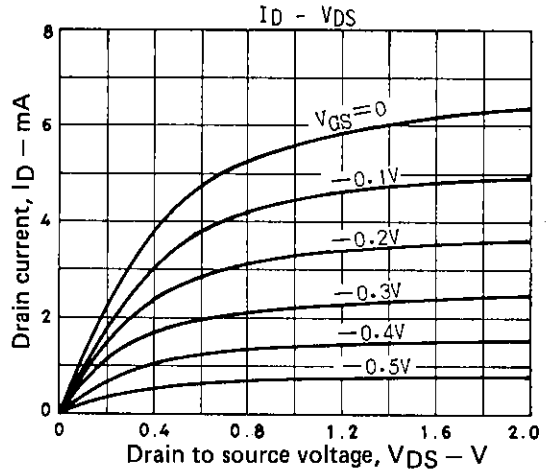
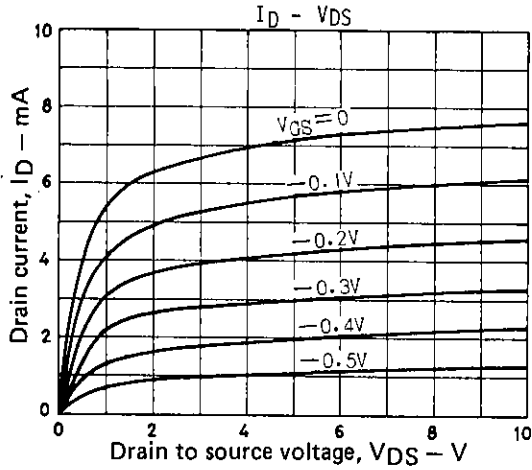
5.0	F	12.0	10.0	G	24.0	16.0	H	38.0
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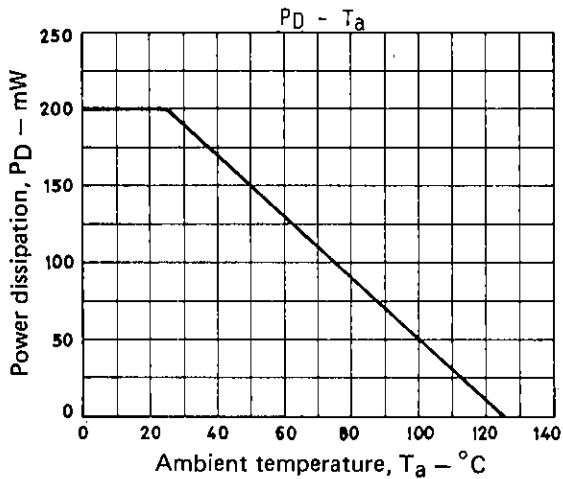
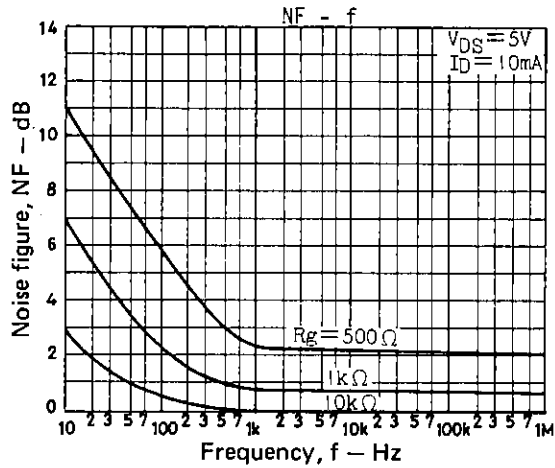
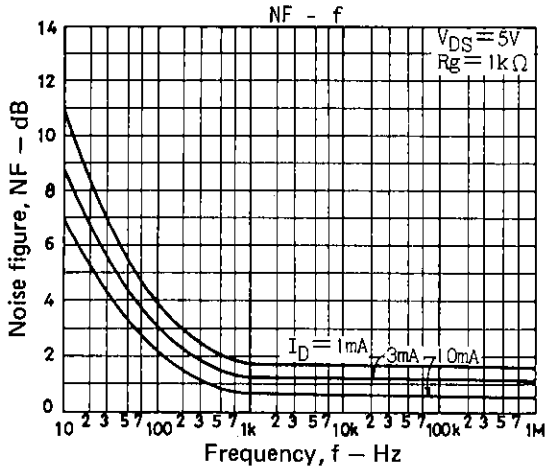
**Package Dimensions 2034**  
(unit: mm)



D: Drain  
G: Gate  
S: Source

SANYO: SPA





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