

<b>SANYO</b>	No.1439B	<b>2SK445</b>
		N-Channel Junction Silicon FET

**Video Camera 1st Stage Applications**

**Features**

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

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

			unit
Drain-to-Source Voltage	V <sub>DSS</sub>	15	V
Gate-to-Drain Voltage	V <sub>GDS</sub>	-15	V
Gate Current	I <sub>G</sub>	10	mA
Drain Current	I <sub>D</sub>	50	mA
Allowable Power Dissipation	P <sub>D</sub>	300	mW
Junction Temperature	T <sub>J</sub>	125	°C
Storage Temperature	T <sub>stg</sub>	-55 to +125	°C

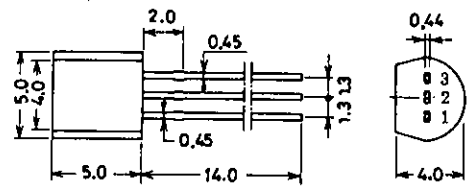
**Electrical Characteristics at Ta = 25°C**

			min	typ	max	unit
G-D Breakdown Voltage	V <sub>(BR)GDS</sub>	I <sub>G</sub> = -10μA, V <sub>DS</sub> = 0	-15			V
Gate Cutoff Current	I <sub>GSS</sub>	V <sub>GS</sub> = -10V, V <sub>DS</sub> = 0			-1.0	nA
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> = 5V, I <sub>D</sub> = 100μA		-0.9	-2.0	V
Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> = 5V, V <sub>GS</sub> = 0	5.0※		38.0※	mA
Forward Transfer Admittance	$ Y_{fs} $	V <sub>DS</sub> = 5V, V <sub>GS</sub> = 0, f = 1kHz	20	30		mS
Input Capacitance	Ciss	V <sub>DS</sub> = 5V, V <sub>GS</sub> = 0, f = 1MHz		9.0		pF
Reverse Transfer Capacitance	Crss	V <sub>DS</sub> = 5V, V <sub>GS</sub> = 0, f = 1MHz		2.8		pF
Noise Figure	NF	V <sub>DS</sub> = 5V, R <sub>g</sub> = 1kΩ, I <sub>D</sub> = 1mA, f = 1kHz		1.5		dB

※ : The 2SK445 is classified by V<sub>DS</sub> = 5V as follows : (unit : mA)

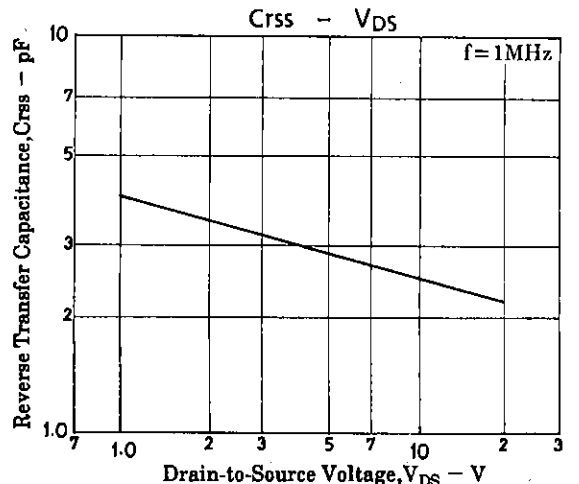
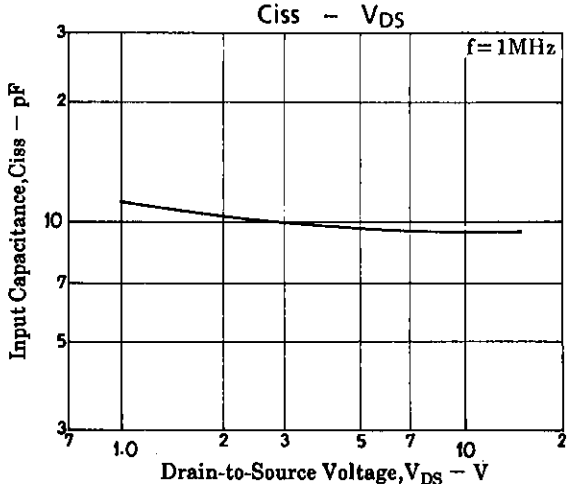
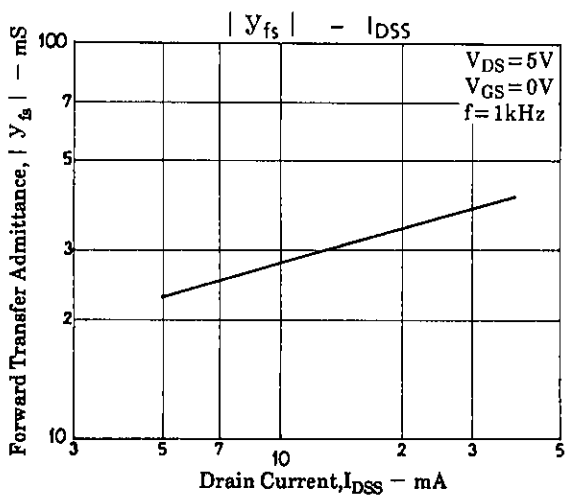
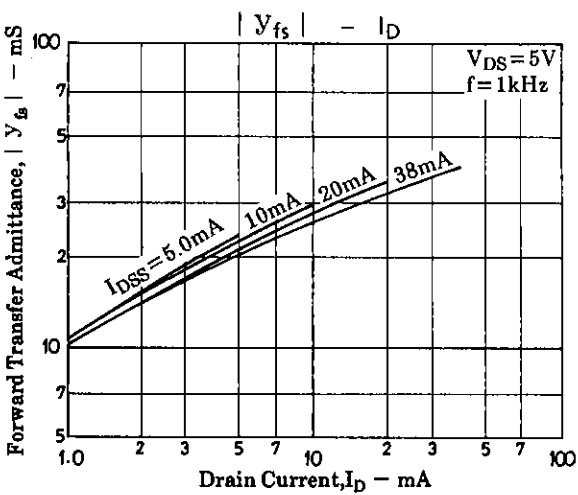
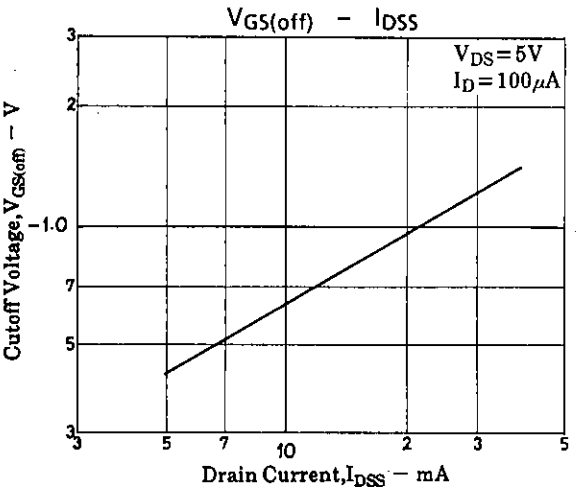
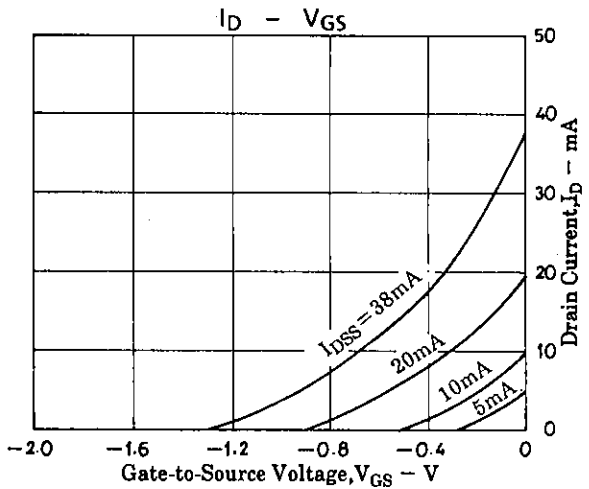
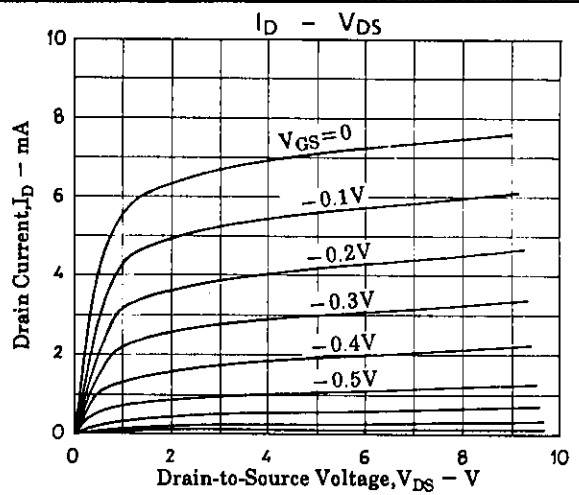
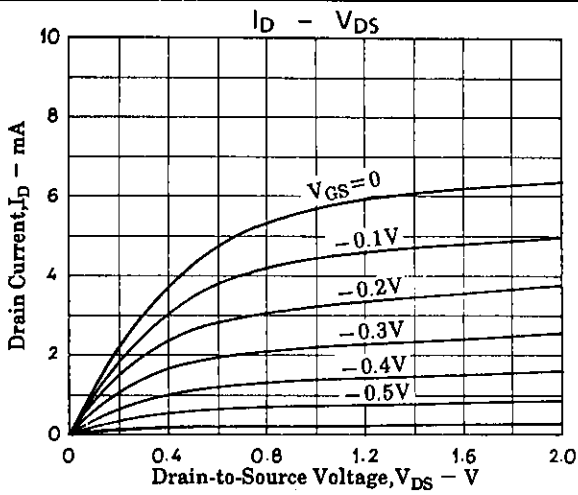
5.0	F	12.0	10.0	G	24.0	16.0	H	38.0
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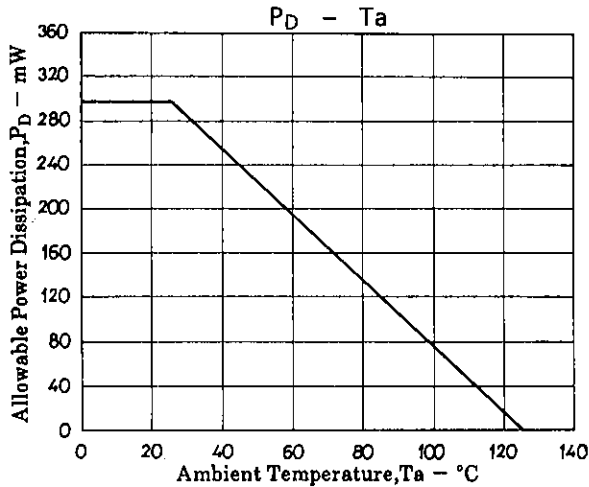
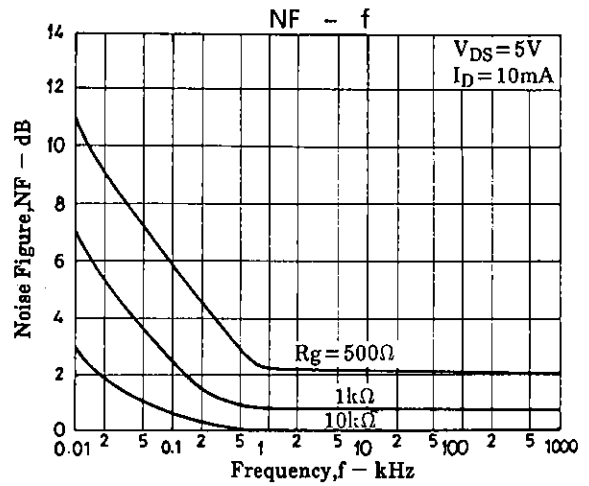
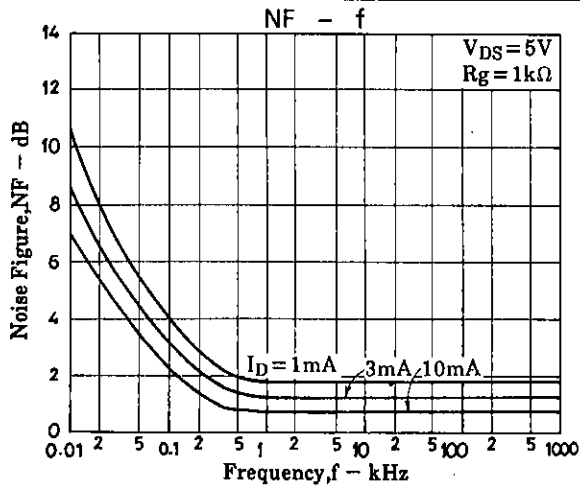
**Package Dimensions 2005B**  
(unit : mm)



JEDEC : TO-92      1 : Drain  
 EIAJ : SC-43      2 : Source  
 SANYO : NP        3 : Gate

2SK445





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