



## TO-92S Plastic-Encapsulate Transistors

**K596** Si N-CHANNEL JUNCTION FET

### FEATURES

Power dissipation

$$P_{CM}: 0.1W \text{ ( } T_{amb}=25 \text{ )}$$

Gate Current

$$I_G: 10mA$$

Drain current

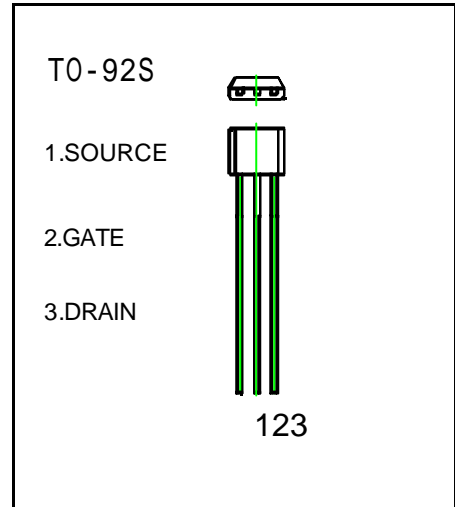
$$I_D: 1mA$$

Drain-Source voltage

$$BV_{GDO}: -20 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55 \text{ to } +150$$



### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25$ unless otherwise specified )

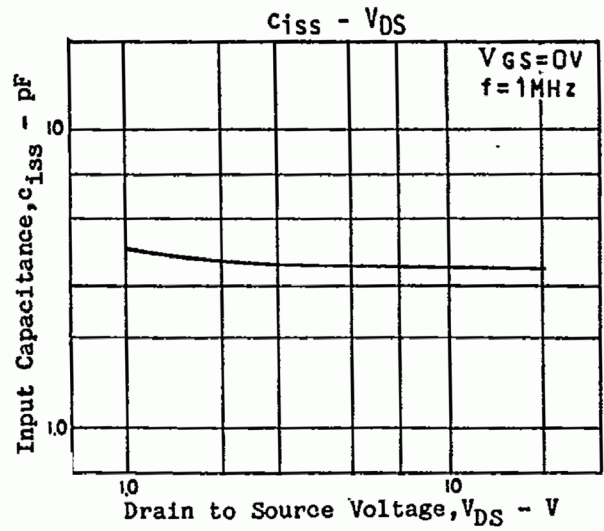
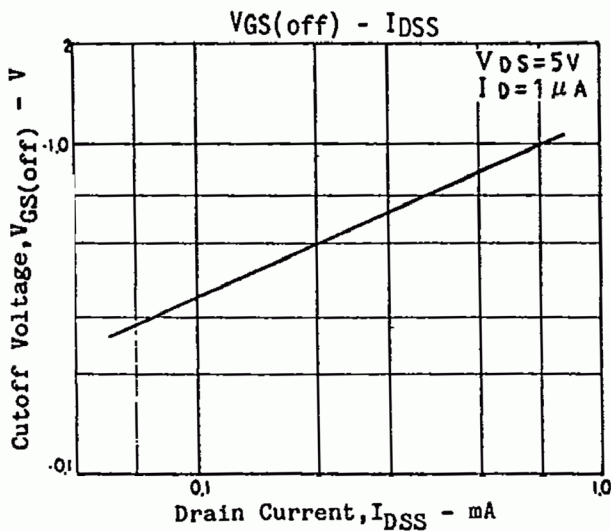
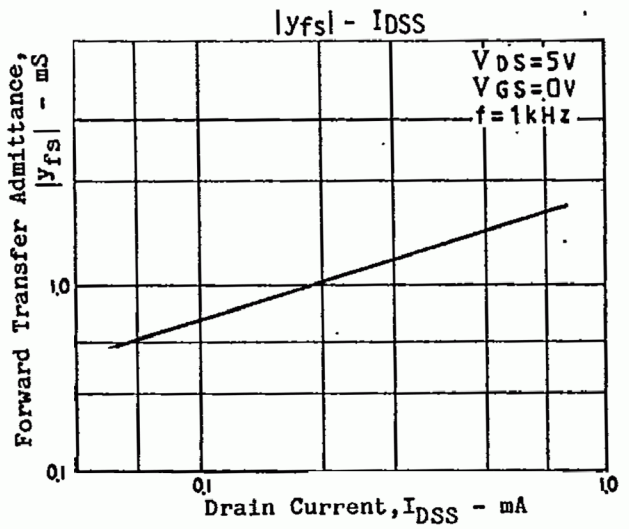
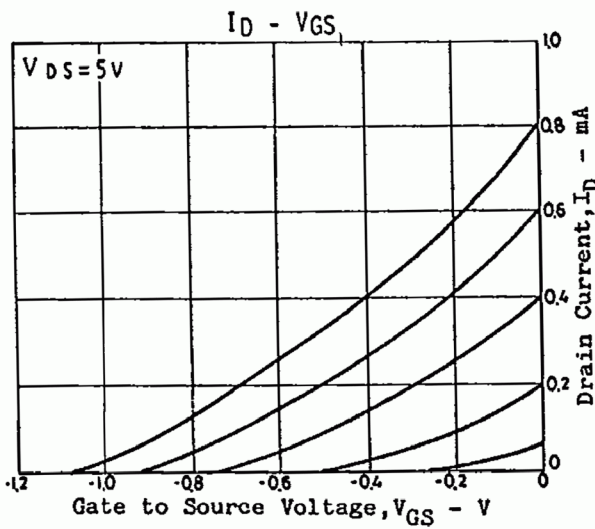
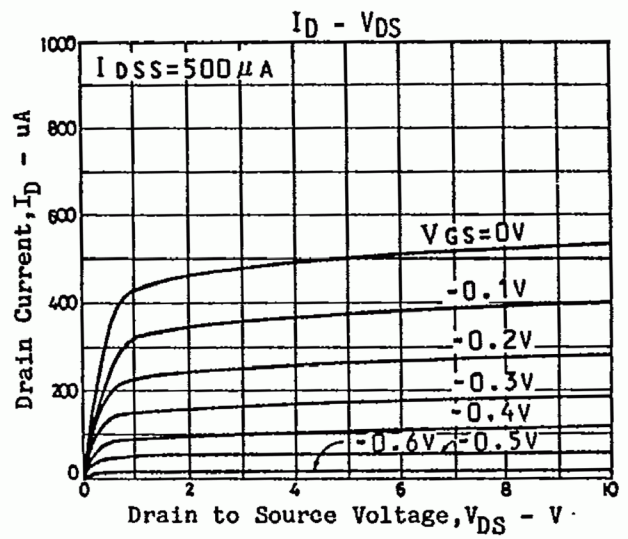
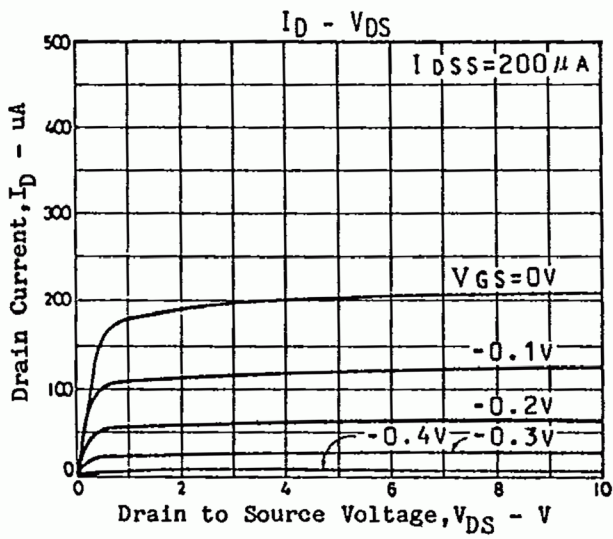
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Gate-Drain breakdown Voltage	$BV_{GDO}$	$I_G = -100 \mu A$	-20			V
Gate-Source cut-off Voltage	$V_{GS(off)}$	$V_{DS} = 5V, I_D = 1 \mu A$		-0.6	-1.5	V
Drain Current	$I_{DSS}$	$V_{DS} = 5V, V_{GS} = 0$	100		800	$\mu A$
Forward Transfer Admittance	$ Y_{FS} $	$V_{DS} = 5V, V_{GS} = 0, f = 1KHz$	0.4	1.2		mS
Input Capacitance	$C_{iss}$	$V_{DS} = 5V, V_{GS} = 0, f = 1MHz$		3.5		pF
Output Capacitance	$C_{RSS}$	$V_{DS} = 5V, V_{GS} = 0$ $f = 1MHz$		0.65		pF

### $I_{DSS}$ Classification

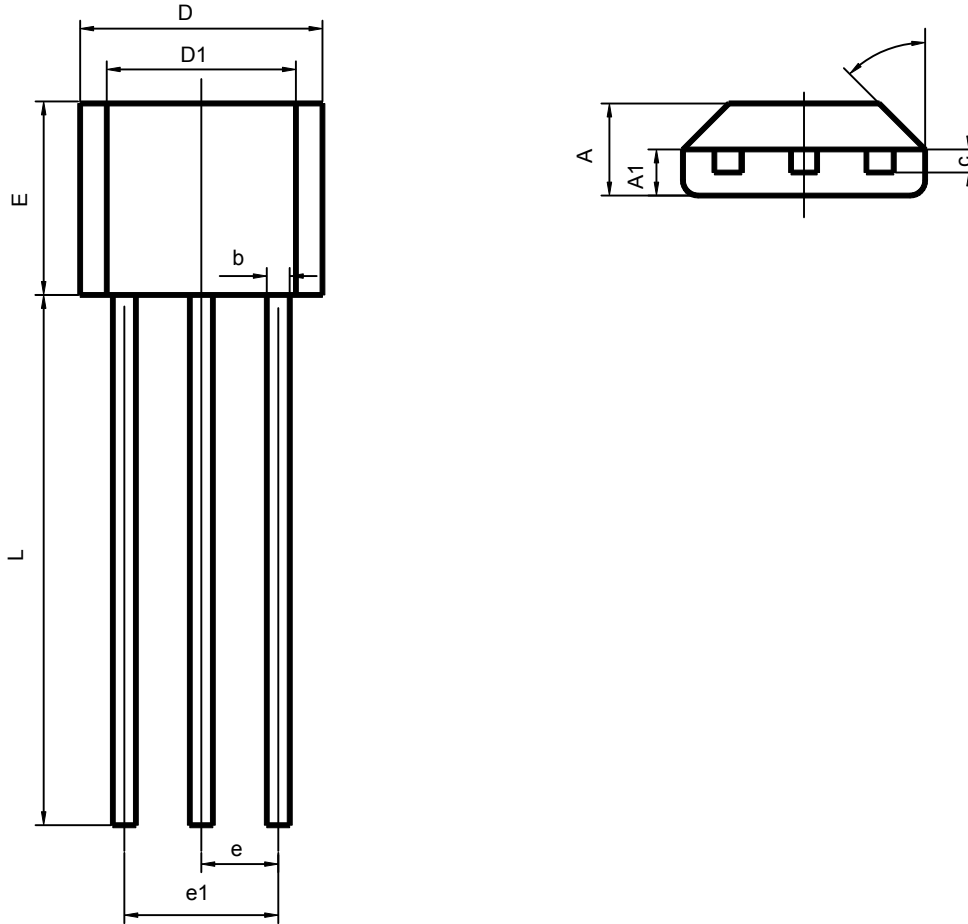
Classification	A	B	C	D	E
$I_{DSS} (\mu A)$	100-170	150-240	210-350	320-480	440-800

# Typical Characteristics

K596



# TO-92S PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
<b>A</b>	1.240	1.620	0.056	0.064
<b>A1</b>	0.660	0.860	0.026	0.034
<b>b</b>	0.380	0.550	0.015	0.022
<b>c</b>	0.360	0.510	0.014	0.020
<b>D</b>	3.850	4.150	0.152	0.163
<b>D1</b>	2.970	3.270	0.117	0.129
<b>E</b>	3.010	3.310	0.119	0.130
<b>e</b>	1.270TYP		0.050TYP	
<b>e1</b>	2.440	2.640	0.096	0.104
<b>L</b>	15.100	15.500	0.594	0.610
$\theta$	45°TYP		45°TYP	