

2026

T-29-25

N-Channel Junction Silicon FET

Capacitor Microphone Applications

©2216

Features

- . Especially suited for use in audio, telephone capacitor microphones
- . Excellent voltage characteristic
- . Excellent transient characteristic
- . Adoption of FBET process

Absolute Maximum Ratings at Ta=25°C

			unit
Gate to Drain Voltage	V_{GDO}	-20	V
Gate Current	I_G	10	mA
Drain Current	I_D	1	mA
Allowable Power Dissipation	P_D	100	mW
Junction Temperature	T_j	125	°C
Storage Temperature	T_{stg}	-55 to +125	°C

Electrical Characteristics at Ta=25°C

			min	typ	max	unit
Gate to Drain Breakdown Voltage	$V_{(BR)GDO}$	$I_G = -100\mu A$	-20			V
Cutoff 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*	μA
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

*: The 2SK597 is classified by I_{DSS} as follows (unit: μA):

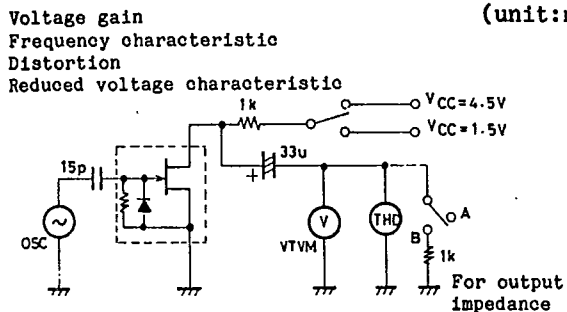
100 A	170 B	240 C	210 C	350 D	320 D	480 E	440 E	800
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[Ta=25°C, V_{CC}=4.5V, R_L=1k Ω , C_{in}=15pF, See specified Test Circuit.]

			min	typ	max	unit
Voltage Gain	G_V	$V_{in} = 10mV, f = 1kHz$		-3.0		dB
Reduced Voltage Characteristic	ΔG_{VV}	$V_{in} = 10mV, f = 1kHz, V_{CC} = 4.5 \rightarrow 1.5V$		-1.2	-3.5	dB
Frequency Characteristic	ΔG_{VF}	$f = 1kHz \text{ to } 110Hz$			-1.0	dB

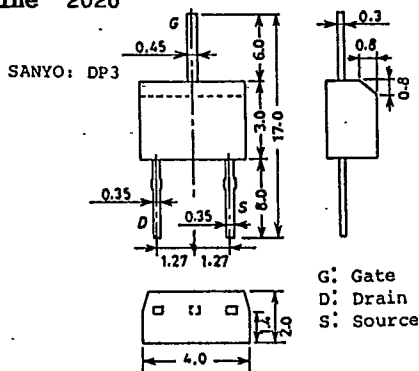
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Specified Test Circuit



Case Outline 2026

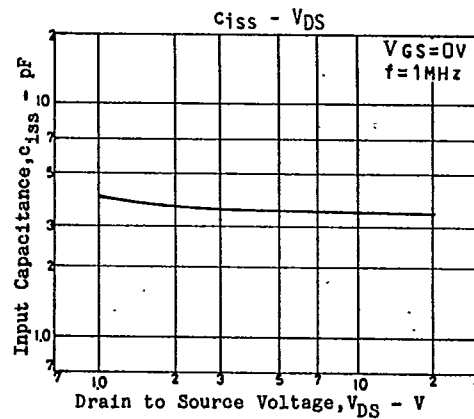
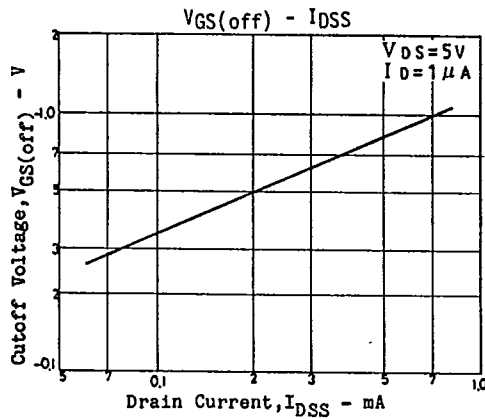
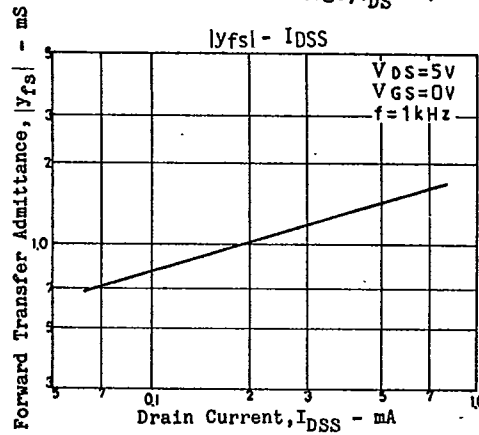
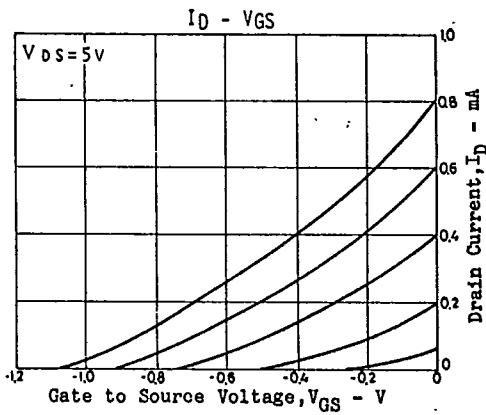
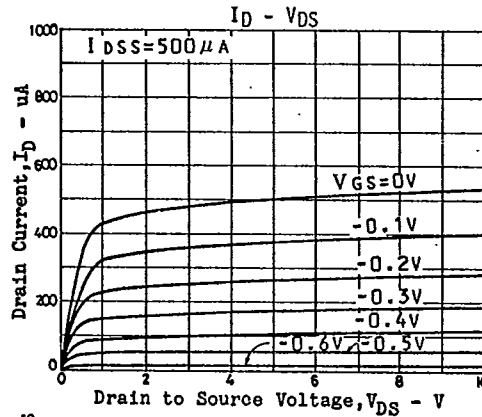
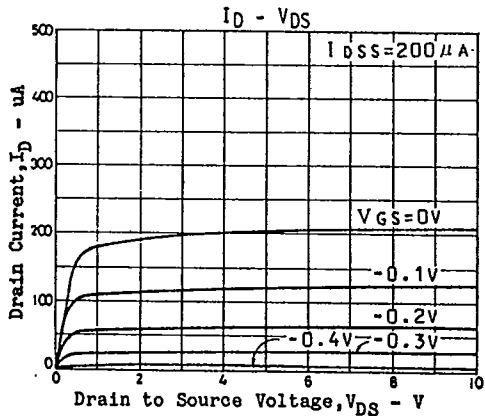
(unit:mm)



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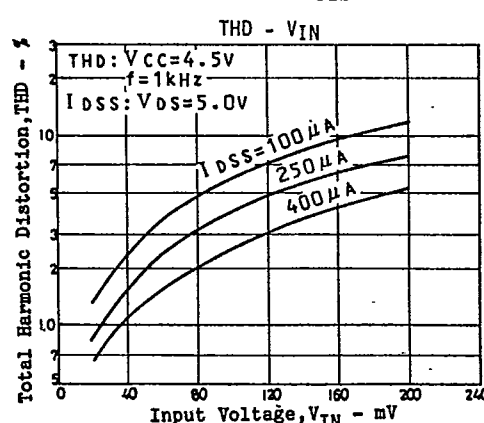
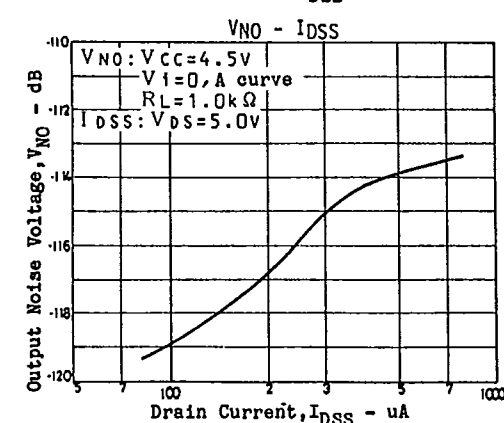
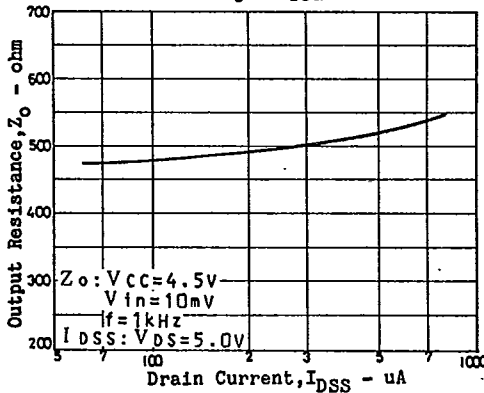
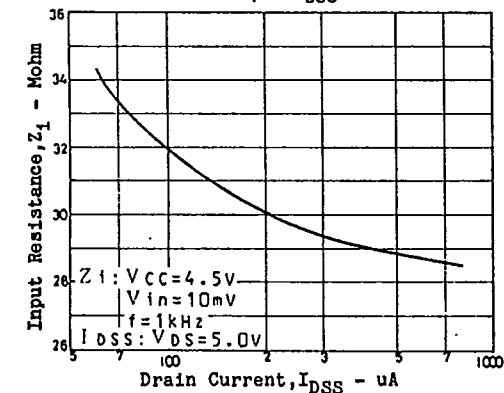
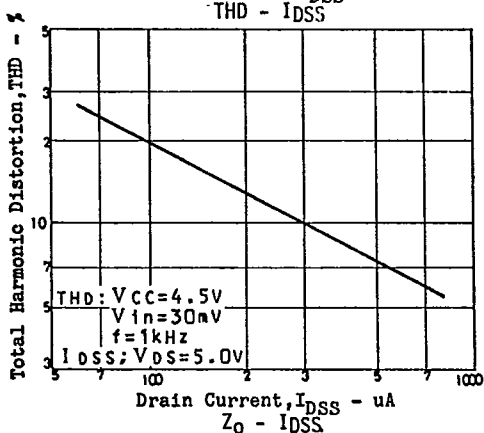
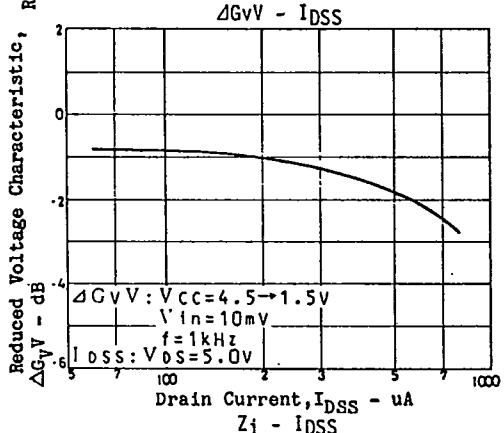
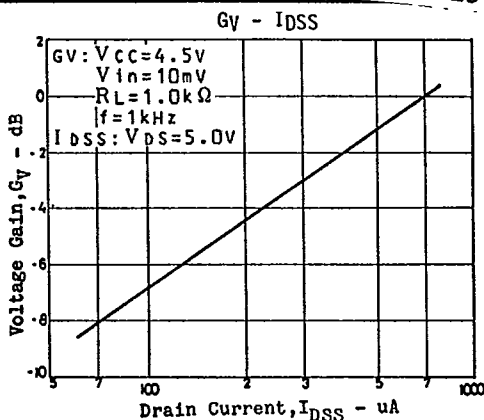
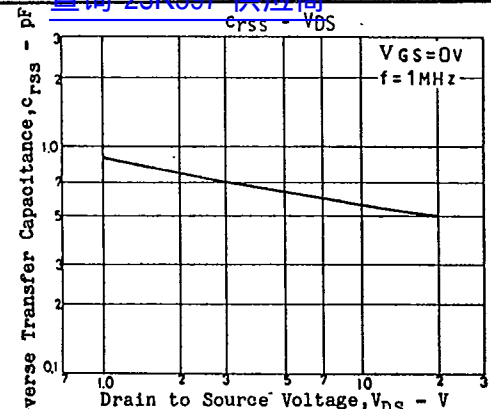
			min	typ	max	unit
Input Resistance	Z_{in}	$f=1\text{kHz}$	25			Mohm
Output Resistance	Z_o	$f=1\text{kHz}$			700	ohm
Total Harmonic Distortion	THD	$V_{in}=30\text{mV}, f=1\text{kHz}$		1.0		%
Output Noise Voltage	V_{NO}	$V_{in}=0, A \text{ curve}$			-110	dB



2SK597

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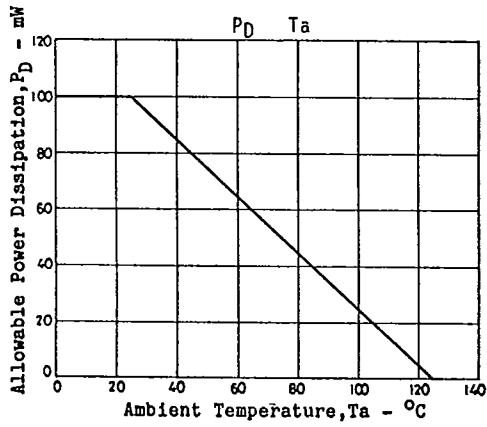
查询"2SK597"供应商



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2SK597

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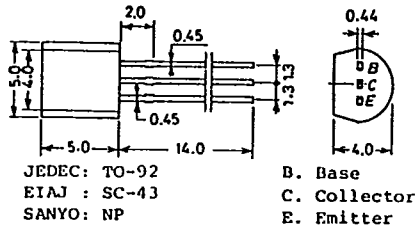


T-91-20

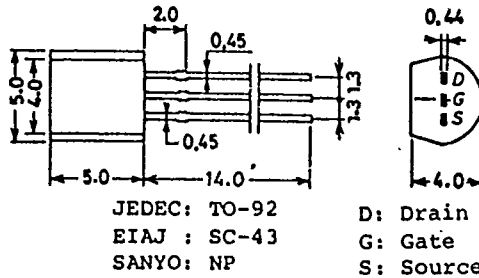
CASE OUTLINES OF LEAD FORMED SMALL SIGNAL TRANSISTORS

- All of Sanyo lead formed small signal transistor case outlines are illustrated below.
- All dimensions are in mm, and dimensions which are not followed by min. or max. are represented by typical values.
- No marking is indicated.

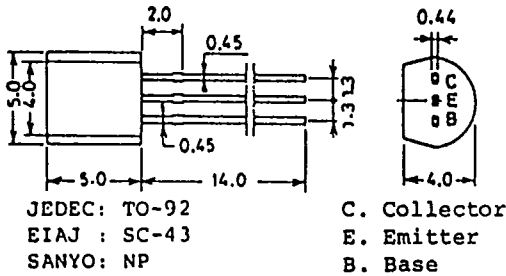
Case Outline-[2003A] unit: mm



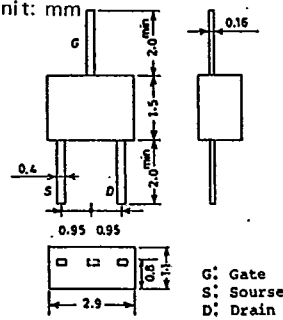
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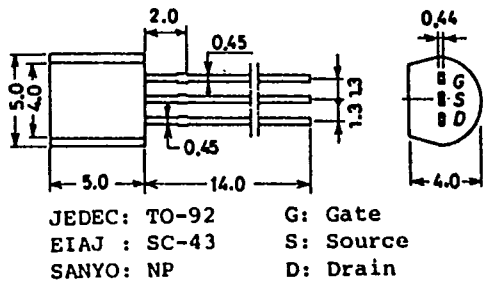
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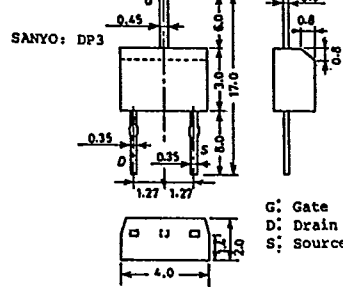
Case Outline-[2025] unit: mm



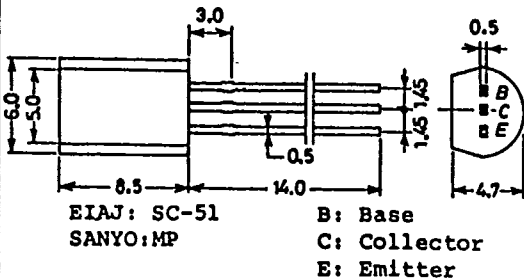
Case Outline-[2005A] unit: mm



Case Outline-[2026] unit: mm



Case Outline-[2006A] unit: mm



Case Outline-[2027A] unit: mm

