

2026

T-29-25

N-Channel Junction Silicon FET

Capacitor Microphone Applications

©1393A

Features

- Especially suited for use in audio, telephone capacitor microphones.
- High $|y_{fs}|$.
- Excellent voltage characteristic.

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

		unit
Gate-Drain Voltage	V_{GDO}	-20 V
Gate Current	I_G	10 mA
Allowable Power Dissipation	P_D	100 mW
Junction Temperature	T_J	125 $^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +125 $^\circ\text{C}$

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

		min	typ	max	unit
Drain Current	I_{DSS} $V_{DS}=5V, V_{GS}=0$	60*		800*	μA

*: The 2SK377 is classified by drain current I_{DSS} as follows (unit: μA):

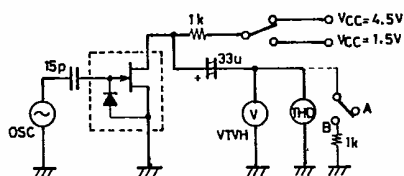
60	J	180	150	K	300	250	L	500	400	M	800
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[$T_a=25^\circ\text{C}, V_{CC}=4.5V, R_L=1\text{k}\Omega, C_{in}=15\text{pF}$, specified Test Circuit

		min	typ	max	unit
Transmission Loss	G_V $f=1\text{kHz}, V_{in}=100\text{mV}$	-3.5			dB
Reduced Voltage Characteristic	ΔG_V $f=1\text{kHz}, V_{in}=100\text{mV}$ $V_{CC}=4.5$ to $1.5V$			-3	dB
Frequency Response	ΔG_V $f=1\text{kHz to } 110\text{Hz}, V_{in}=100\text{mV}$			-1	dB
Input Impedance	Z_{in} $f=1\text{kHz}$	18.0			Mohm
Output Impedance	Z_o $f=1\text{kHz}$			1.0	kohm
Total Harmonic Distortion	THD $f=1\text{kHz}, V_{in}=100\text{mV}$		3		%
Output Noise Voltage	V_{NO} $V_{in}=0, A$ curve			-110	dB

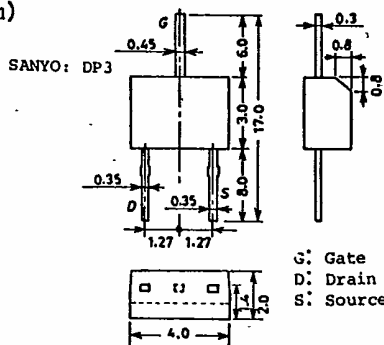
Specified Test Circuit

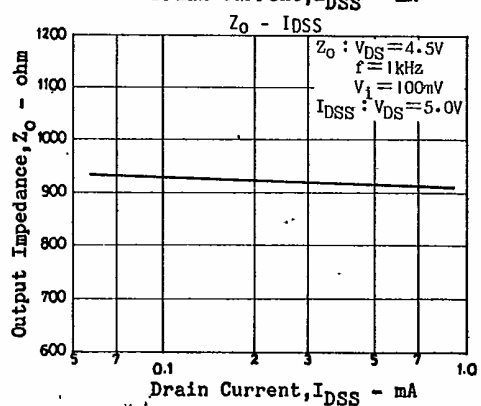
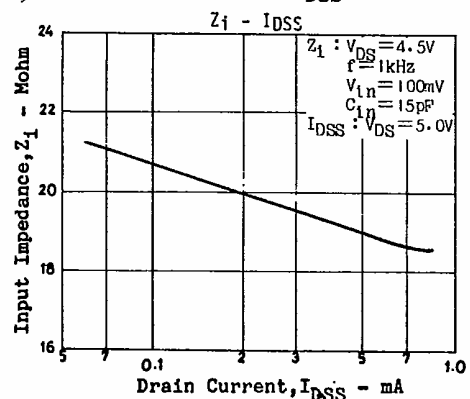
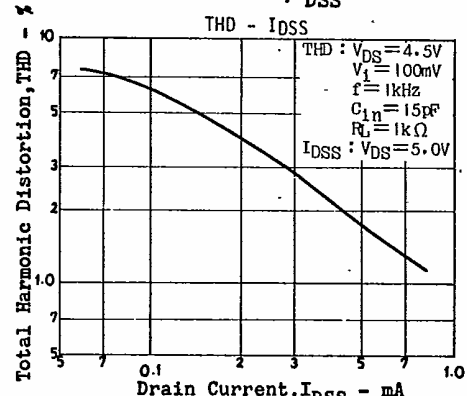
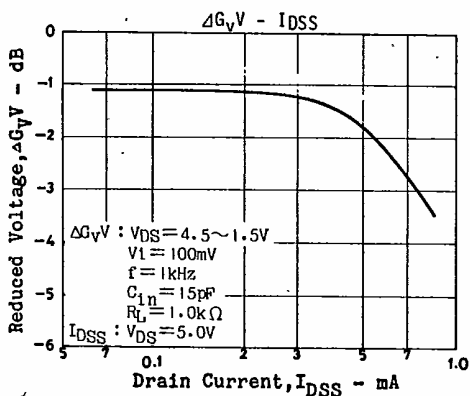
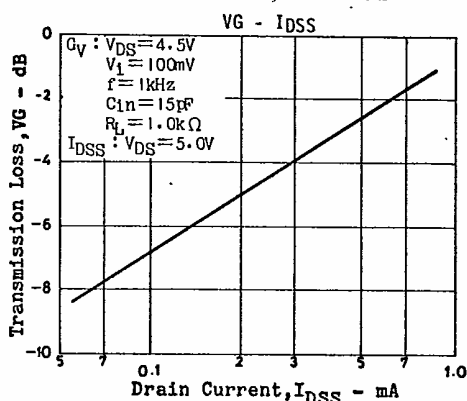
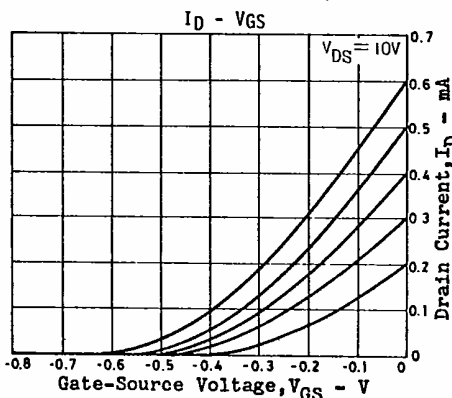
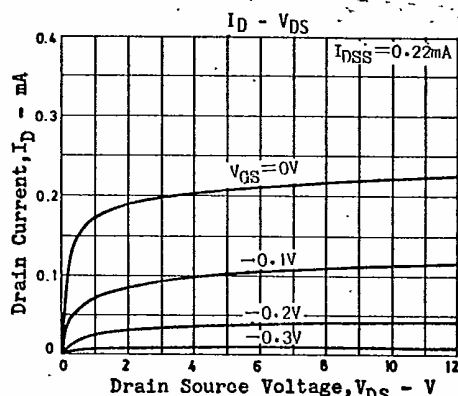
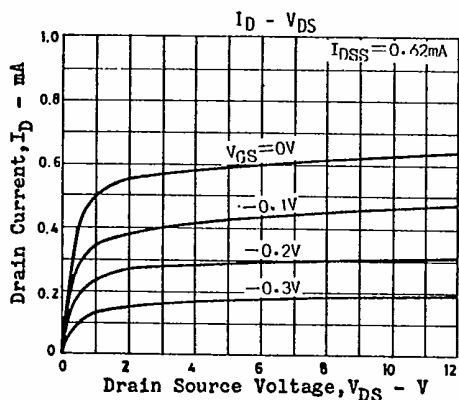
Transmission loss
Frequency response
Distortion
Reduced voltage characteristic

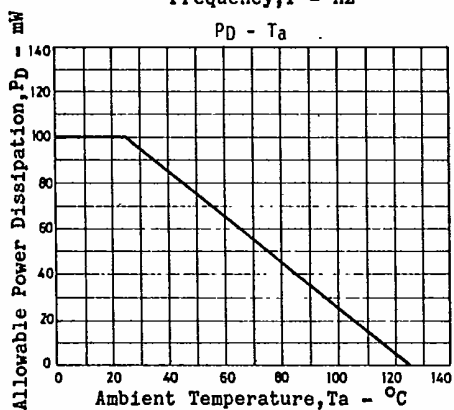
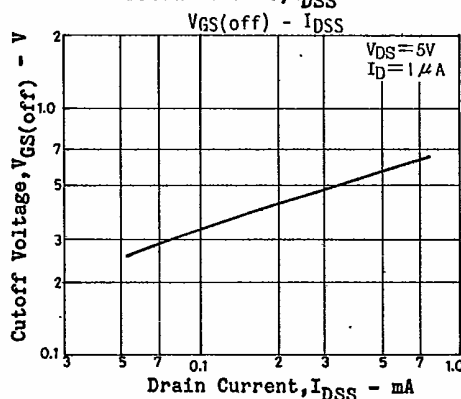
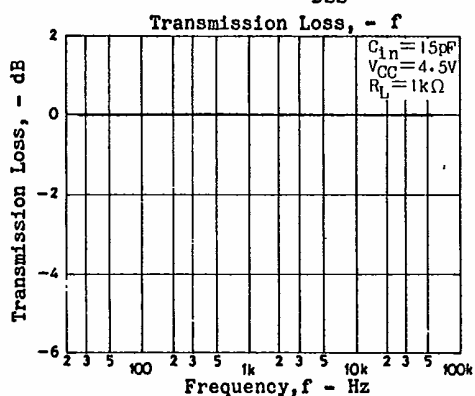
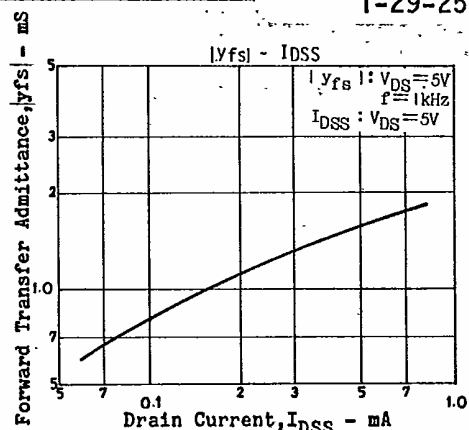
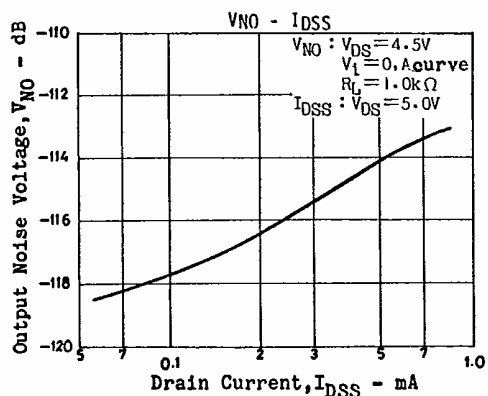


For output impedance

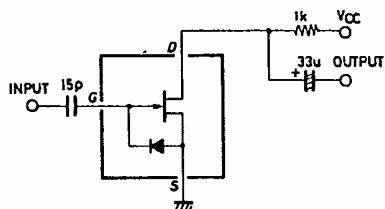
Case Outline 2026 (unit:mm)







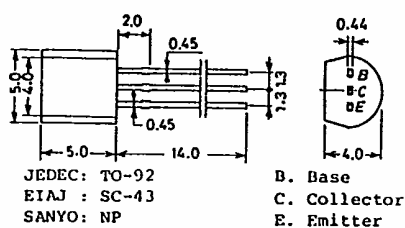
Sample Application Circuit: 2-wire type



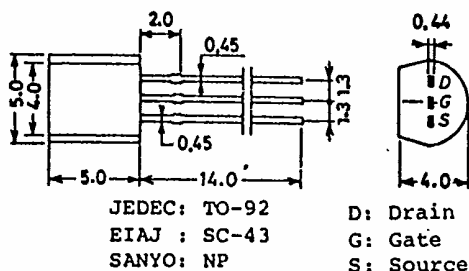
CASE OUTLINES OF LEAD FORMED SMALL SIGNAL TRANSISTORS

- 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.

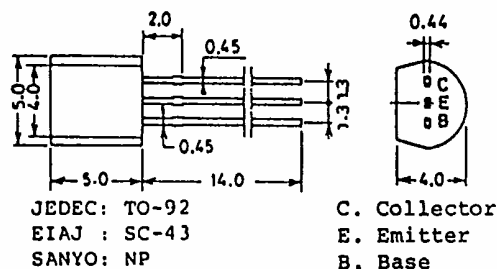
Case Outline—[2003A] unit: mm



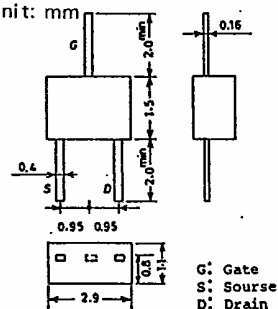
Case Outline—[2019A] unit: mm



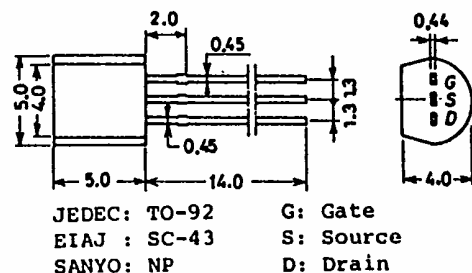
Case Outline—[2004A] unit: mm



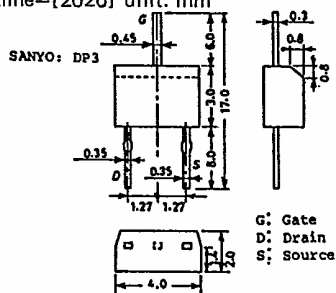
Case Outline—[2025] unit: mm



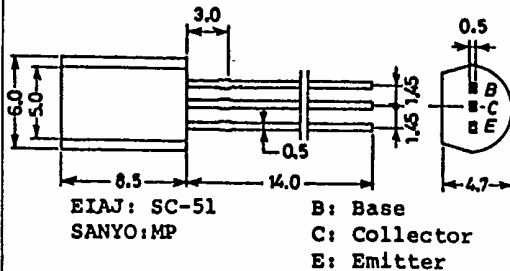
Case Outline—[2005A] unit: mm



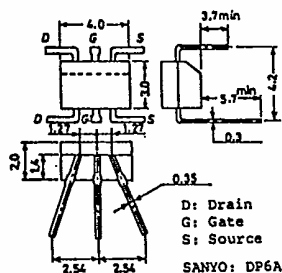
Case Outline—[2026] unit: mm



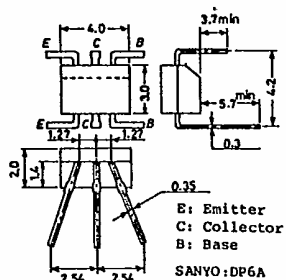
Case Outline—[2006A] unit: mm



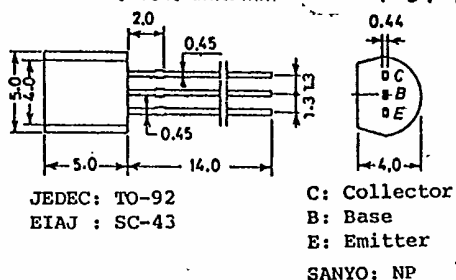
Case Outline—[2027A] unit: mm



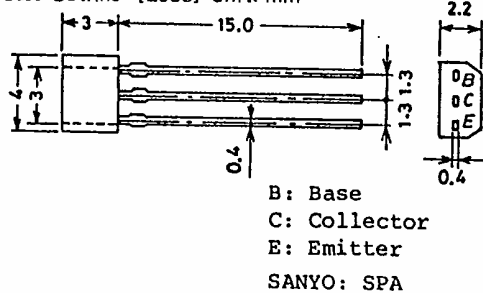
Case Outline—[2029A] unit: mm



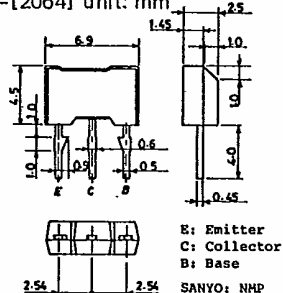
Case Outline—[2061] unit: mm



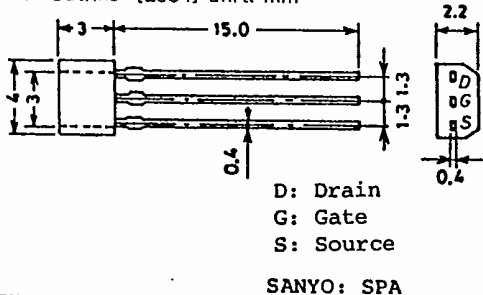
Case Outline—[2033] unit: mm



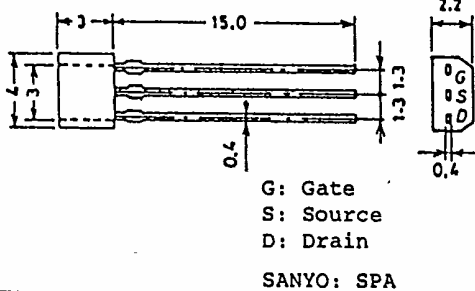
Case Outline—[2064] unit: mm



Case Outline—[2034] unit: mm



Case Outline—[2040] unit: mm



Case Outline—[2051] unit: mm

