

2SK377



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 $T_a=25^\circ\text{C}$

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

\*: The 2SK377 is classified by drain current  $I_{DSS}$  as follows (unit:  $\mu\text{A}$ ):

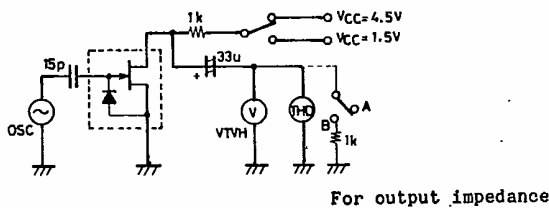
60	J	180	150	K	300	250	L	500	400	M	800
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[ $T_a=25^\circ\text{C}, V_{CC}=4.5V, R_L=1\text{kohm}, C_{in}=15\text{pF}$ , specified Test Circuit

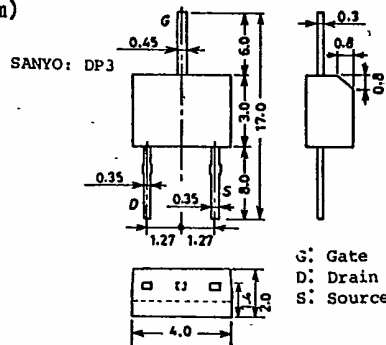
			min	typ	max	unit
Transmission Loss	$G_V$	$f=1\text{kHz}, V_{in}=100\text{mV}$		-3.5		dB
Reduced Voltage Characteristic	$\Delta G_{VV}$	$f=1\text{kHz}, V_{in}=100\text{mV}$ $V_{CC}=4.5$ to $1.5V$			-3	dB
Frequency Response	$\Delta G_{Vf}$	$f=1\text{kHz to } 110\text{Hz}, V_{in}=100\text{mV}$			-1	dB
Input 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

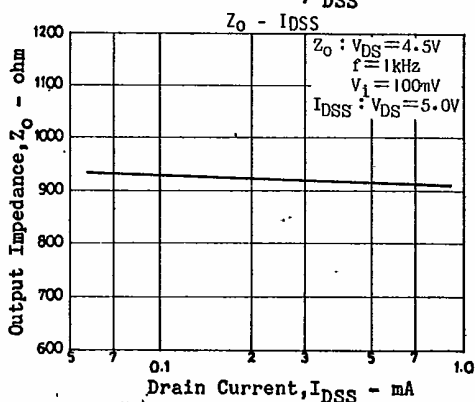
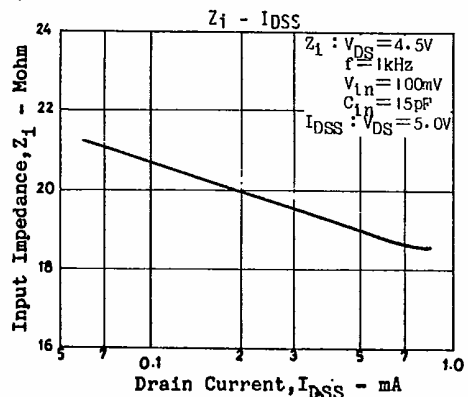
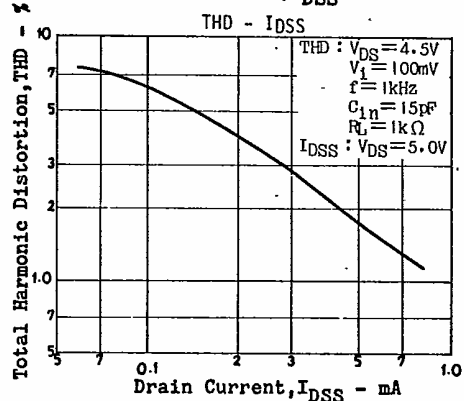
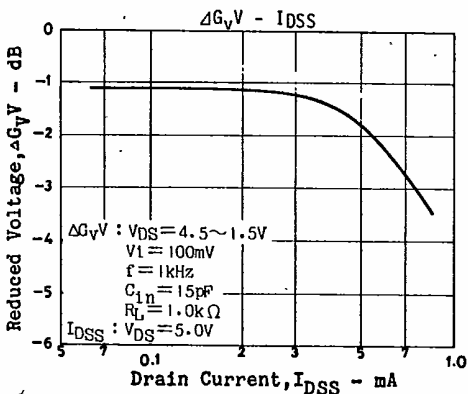
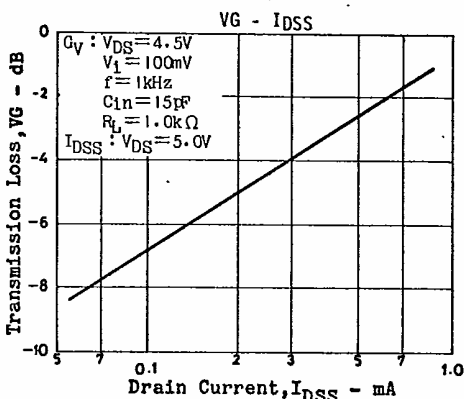
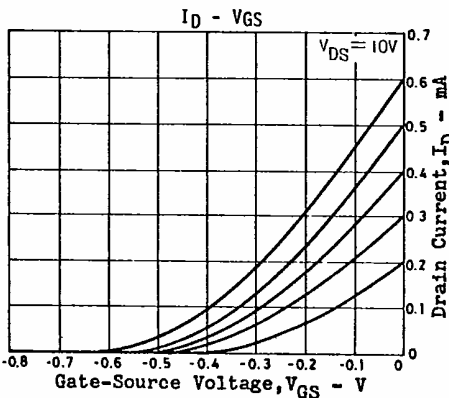
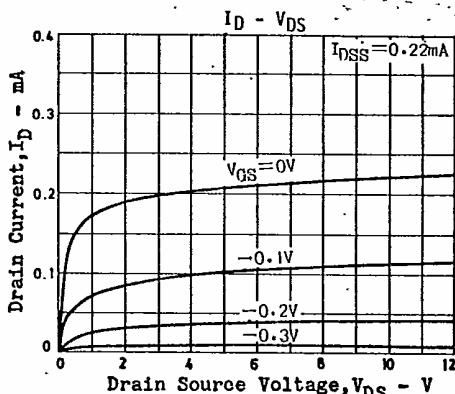
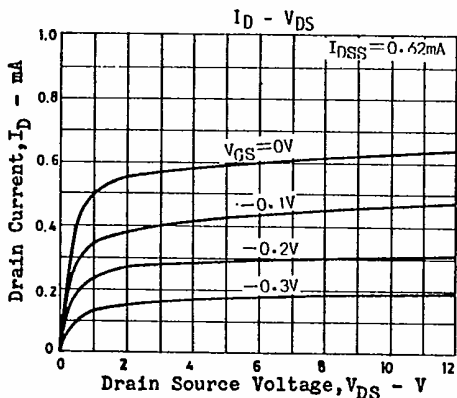
## Specified Test Circuit

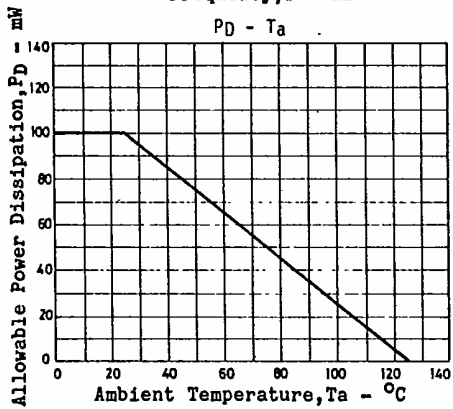
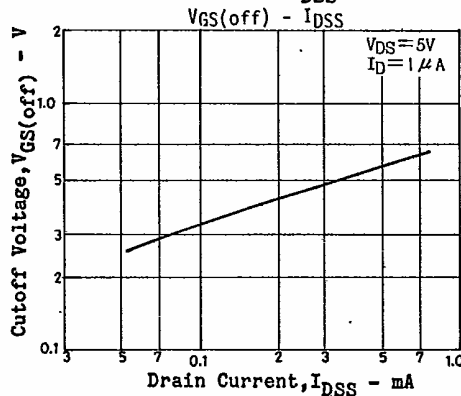
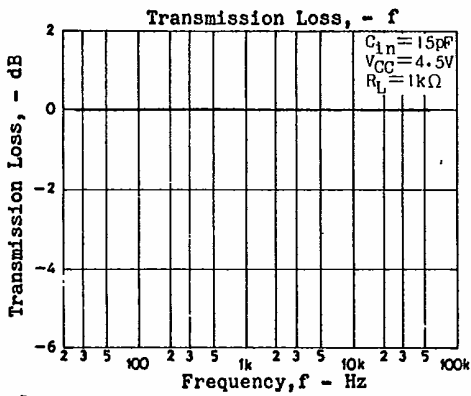
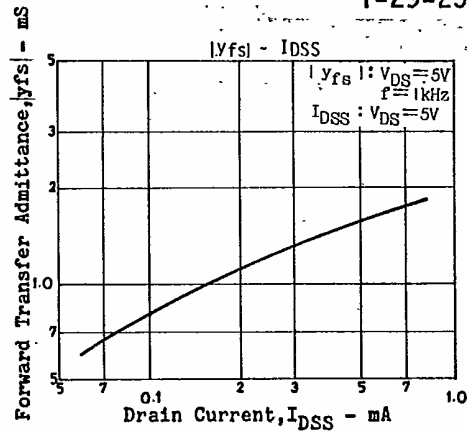
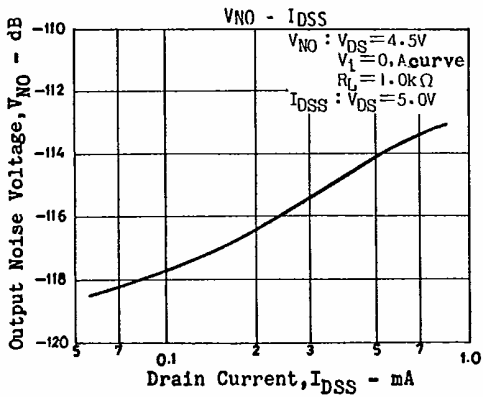
- Transmission loss
- Frequency response
- Distortion
- Reduced voltage characteristic



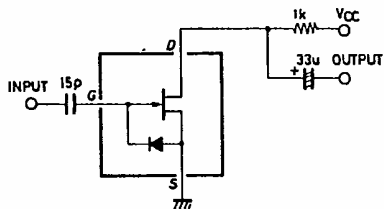
## Case Outline 2026 (unit: mm)







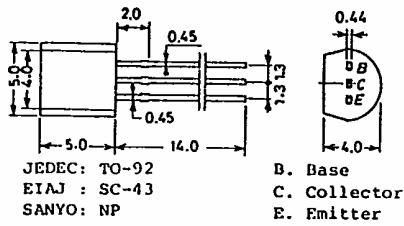
**Sample Application Circuit: 2-wire type**



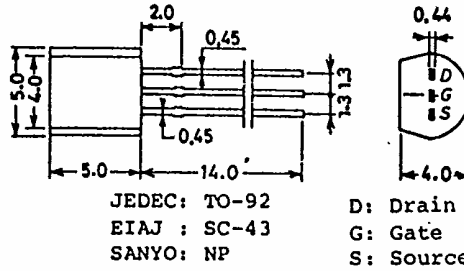
# CASE OUTLINES OF LEAD FORMED SMALL SIGNAL TRANSISTORS

- 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.

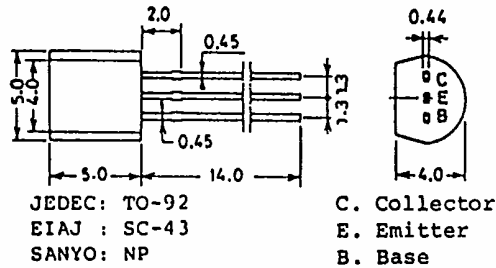
Case Outline-[2003A] unit: mm



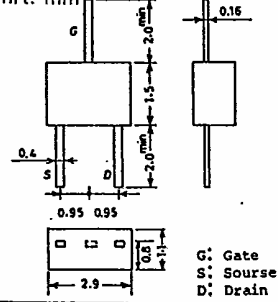
Case Outline-[2019A] unit: mm



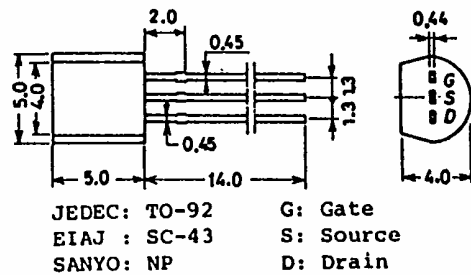
Case Outline-[2004A] unit: mm



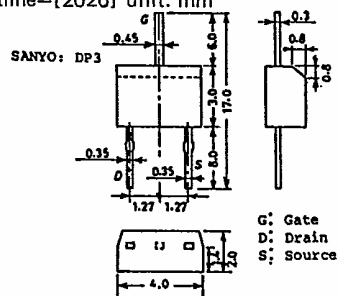
Case Outline-[2025] unit: mm



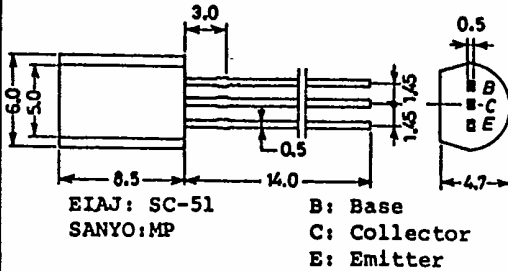
Case Outline-[2005A] unit: mm



Case Outline-[2026] unit: mm



Case Outline-[2006A] unit: mm



Case Outline-[2027A] unit: mm

