

2025

Capacitor Microphone Applications

FEATURE

- Because it has an ultra-compact outline, sets can be made compact.

ABSOLUTE MAXIMUM RATINGS/T_a = 25°C

ABSOLUTE MAXIMUM RATINGS/T _a = 25°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	°C
Storage ambient temperature	T _{stg}	-55 to +125	°C

ELECTRICAL CHARACTERISTICS/ $T_a = 25^\circ\text{C}$

ELECTRICAL CHARACTERISTICS/T _a = 25°C				min	typ	max	unit
Drain current	I _{DSS}	V _{DS} = 10 V, V _{GS} = 0V		60*		800*	μA

[T_a = 25°C, V_{CC} = 4.5 V, R_D = 680 Ω, C_{in} = 15 pF, in a specified test circuit (conforming with application circuit)].

			min	typ	max	unit
Transmission loss	G_V	$v_i = 10 \text{ mV}$, $f = 1 \text{ kHz}$		-5		dB
Transmission loss voltage-drop characteristics	$\Delta G_V V$	$V_{CC} = 4.5 \text{ to } 1.5 \text{ V}$, $f = 1 \text{ kHz}$ $v_i = 10 \text{ mV}$			-3	dB
Transmission loss frequency characteristics	$\Delta G_V f$	$f = 1 \text{ k to } 110 \text{ Hz}$, $v_i = 10 \text{ mV}$			-1	dB
Input impedance	z_i	$f = 1 \text{ kHz}$	20			M Ω
Output noise voltage	V_{NO}	$v_i = 0$, A-curve			-110	dB

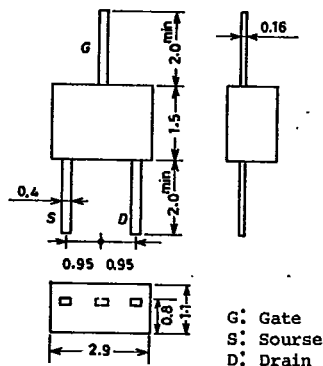
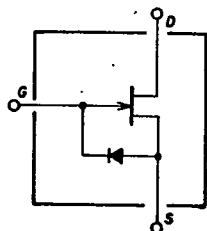
- * 2SK334 is graded as follows by drain current I_{DSS} (unit: μA):

(Note) Marking on device : N

I_{DSS} rank : 11, 12, 13, 14

Case Outline 2025
(unit: mm)

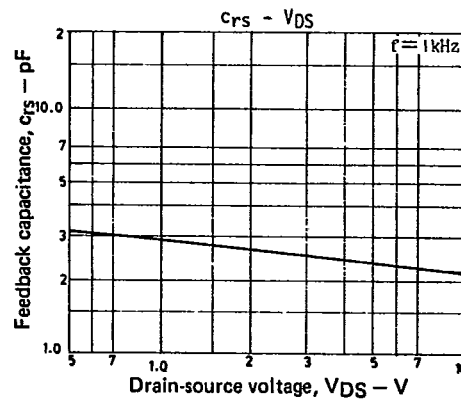
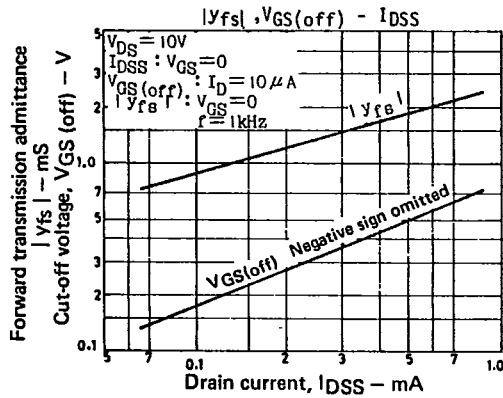
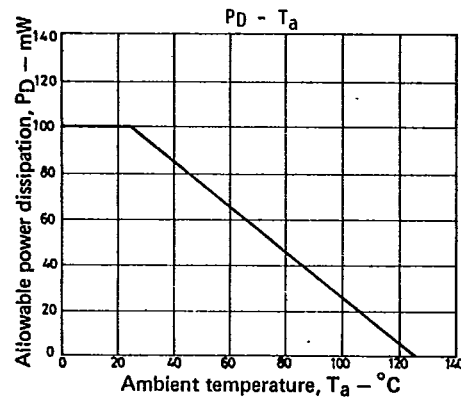
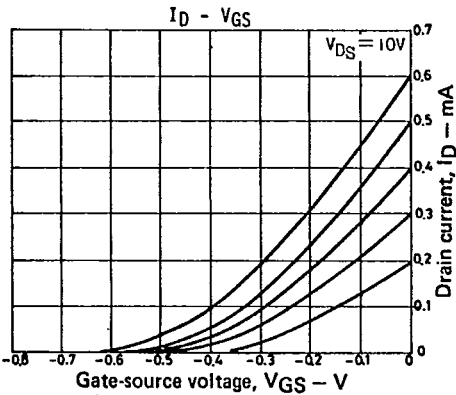
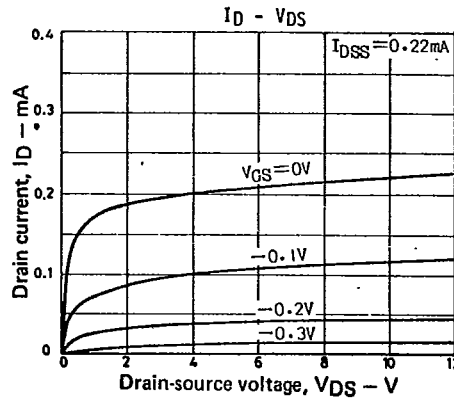
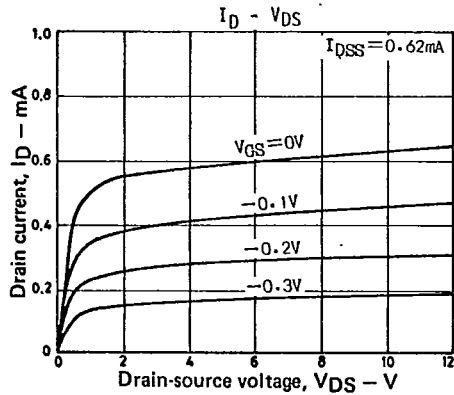
Electrical Connection



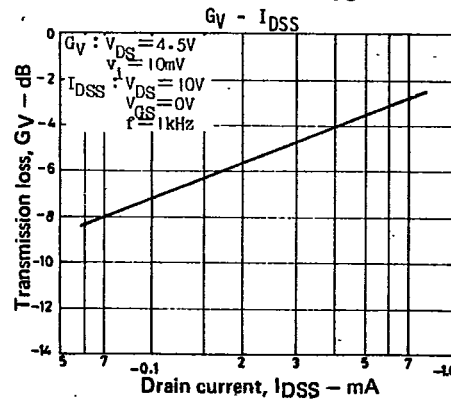
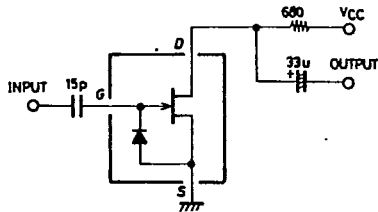
G: Gate
S: Source
D: Drain

2SK334

T-29-25

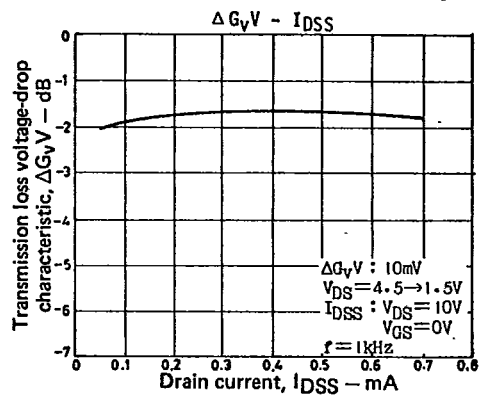
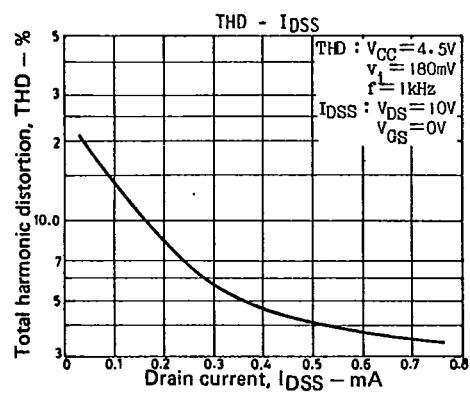


■ Sample application circuit: 2-wire system



2SK334

T-29-25

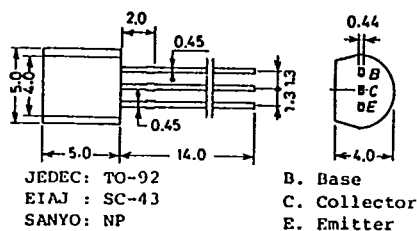


T-91-20

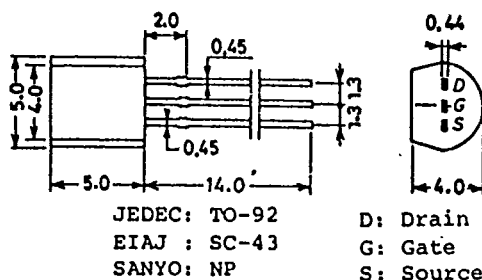
CASE OUTLINES OF LEAD FORMED SMALL SIGNAL TRANSISTORS

- 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.

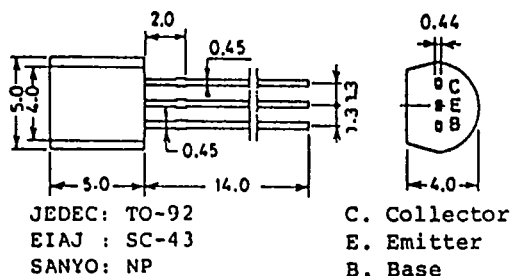
Case Outline—[2003A] unit: mm



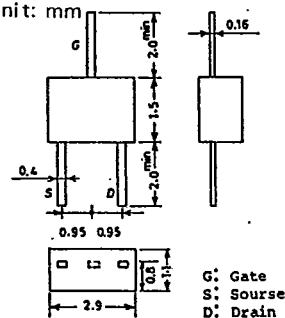
Case Outline—[2019A] unit: mm



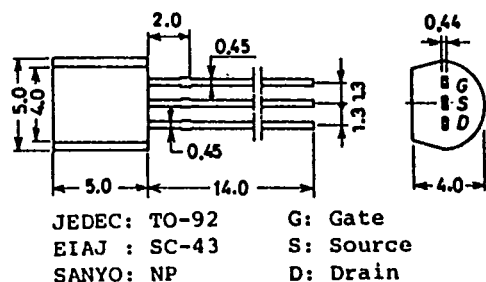
Case Outline—[2004A] unit: mm



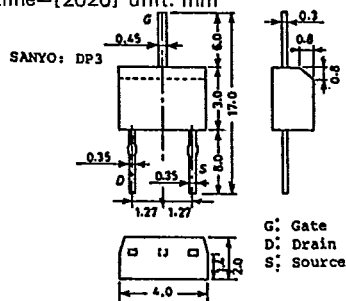
Case Outline—[2025] unit: mm



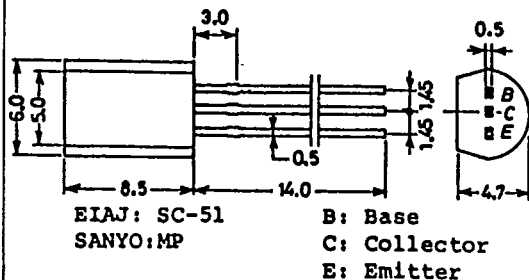
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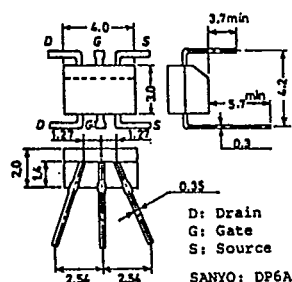
Case Outline—[2026] unit: mm



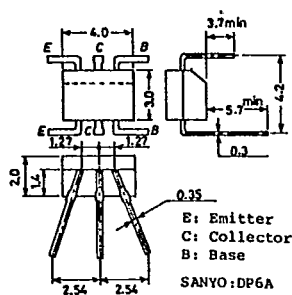
Case Outline—[2006A] unit: mm



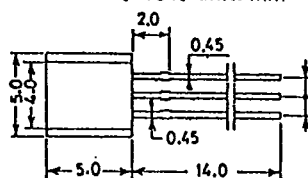
Case Outline—[2027A] unit: mm



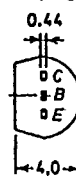
Case Outline—[2029A] unit: mm



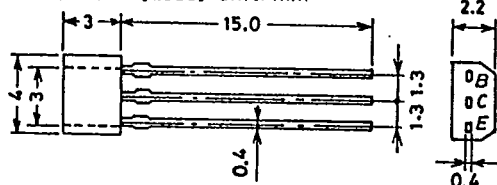
Case Outline—[2061] unit: mm



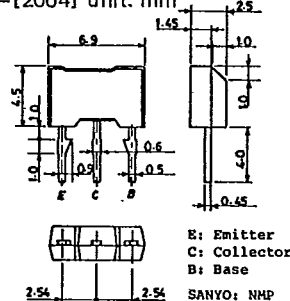
T-91-20



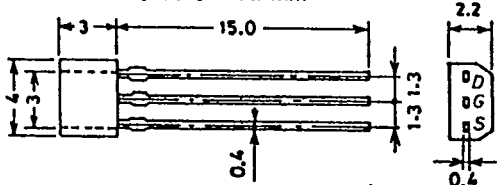
Case Outline—[2033] unit: mm



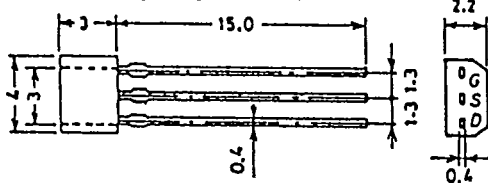
Case Outline—[2064] unit: mm



Case Outline—[2034] unit: mm



Case Outline—[2040] unit: mm



Case Outline—[2051] unit: mm

