



2027A

N-Channel Junction
Silicon Composite FET

T-27-27

Differential Amp Applications

©956C

Features

- Excellent in thermal equilibrium and especially suited for first-stage differential amp of DC amp
- Matched pair capability
- Low noise level

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

			unit
Drain to source voltage	V_{DS}	40	V
Gate to drain voltage	V_{GDS}	-40	V
Gate current	I_G	10	mA
Drain current	I_D	20	mA
Allowable power dissipation	P_D	200	mW
Total dissipation	P_T	400	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +125	$^\circ\text{C}$

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

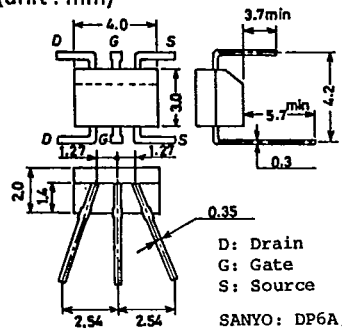
			min	typ	max	unit
Gate to drain breakdown voltage	$V(BR)_{GDS}$	$I_G = -100\mu\text{A}$	-40			V
Common source gate cutoff current	I_{GSS}	$V_{GS} = -20\text{V}, V_{DS} = 0\text{V}$			-1.0	nA
Drain current	I_{DSS}	$V_{DS} = 10\text{V}, V_{GS} = 0\text{V}, \text{Pulse}$	1.2*		12*	mA
Drain current ratio	—	$V_{DS} = 10\text{V}, I_{DSS} \text{ low}/I_{DSS} \text{ high}$	0.9			
Gate to source cutoff voltage	$V_{GS}(\text{off})$	$V_{DS} = 10\text{V}, I_D = 10\mu\text{A}$		-0.5		V
Gate to source voltage drop	ΔV_{GS}	$I_{VGS} \text{ high} - V_{GS} \text{ lowl},$ $V_{DS} = 10\text{V}, I_D = 1\text{mA}$			30	mV
Forward transfer admittance	$ y_{fs} $	$V_{DS} = 10\text{V}, V_{GS} = 0\text{V}, f = 1\text{kHz}$		17		mS
Forward transfer admittance ratio	—	$V_{DS} = 10\text{V}, y_{fs} \text{ small}/y_{fs} \text{ high}$	0.9			
Input capacitance	C_{iss}	$V_{DS} = 10\text{V}, V_{GS} = 0\text{V}, f = 1\text{MHz}$		13		pF
Reverse transfer capacitance	C_{rss}	$V_{DS} = 10\text{V}, V_{GS} = 0\text{V}, f = 1\text{MHz}$		3		pF
Noise figure	NF (1)	$V_{DS} = 10\text{V}, V_{GS} = 0\text{V},$ $R_g = 1\text{k}\Omega, f = 100\text{kHz}$		1.0	3.0	dB
	NF (2)	$V_{DS} = 10\text{V}, V_{GS} = 0\text{V},$ $R_g = 1\text{k}\Omega, f = 1\text{kHz}$		0.6	1.5	dB
Output noise figure	V_{NO}	See specified test circuit. $V_{DS} = 10\text{V}, I_D = 1\text{mA},$ $R_g = 100\Omega, 100\text{dB (IHF-A) Amp}$		35		mV

*: The 2SK332 is classified
by I_{DSS} as follows:
(unit: mA).

1.2	D	3.0
2.5	E	6.0
5.0	F	12.0

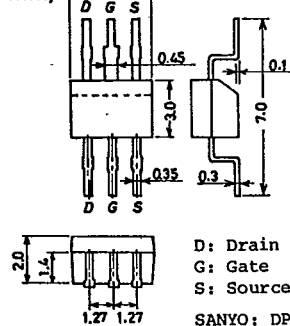
The 2SK332 is provided with a surface mounted package.

Case Outline 2027A
(unit: mm)

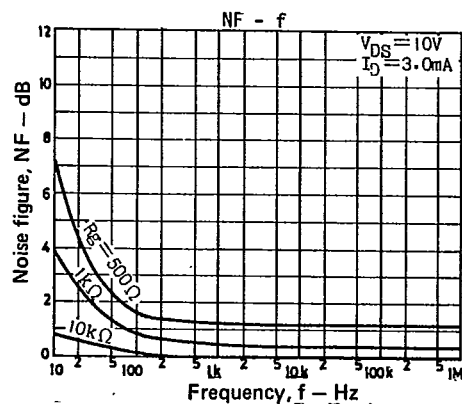
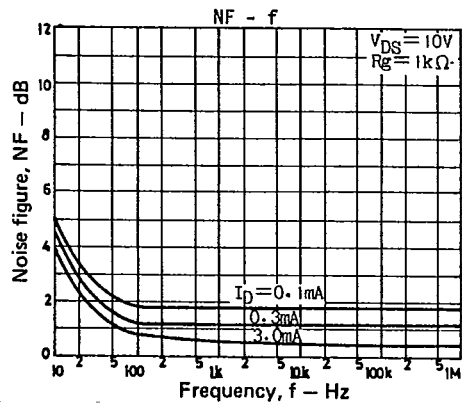
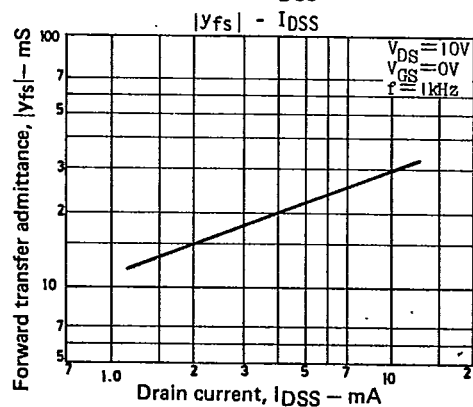
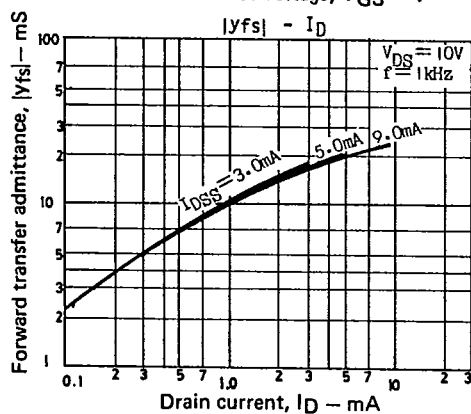
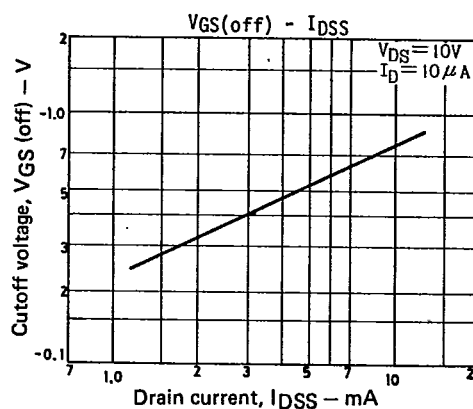
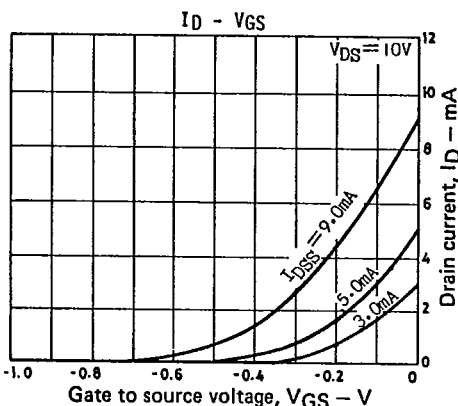
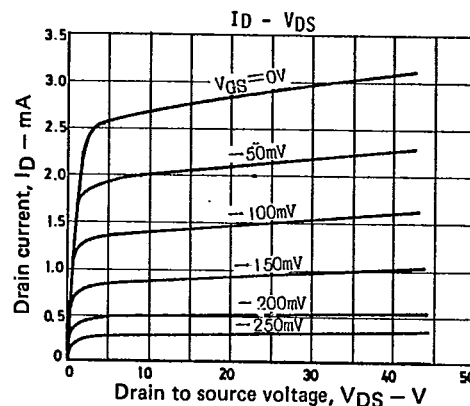
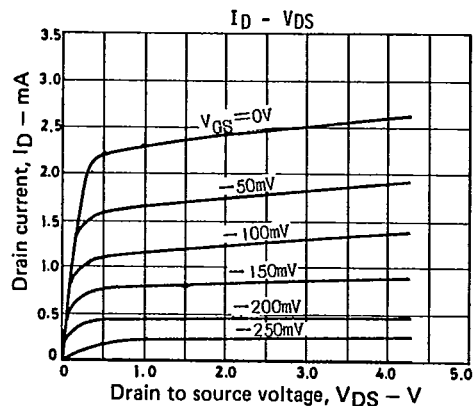


D: Drain
G: Gate
S: Source
SANYO: DP6A.

Case Outline 2028A
(unit: mm)

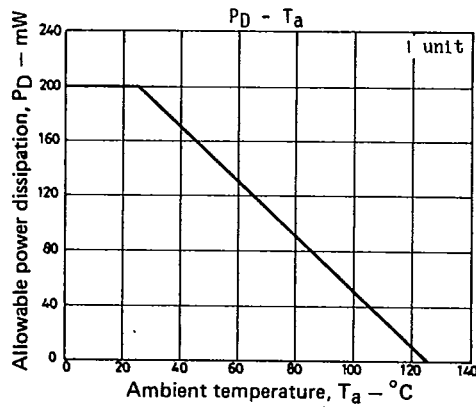
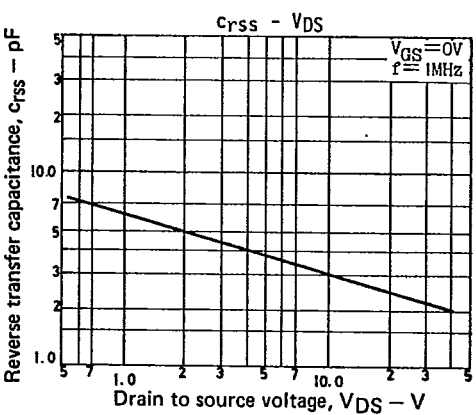
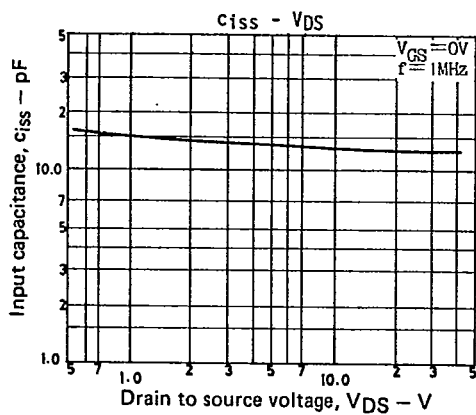


D: Drain
G: Gate
S: Source
SANYO: DP6B



2SK332

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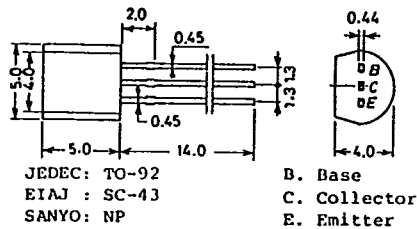


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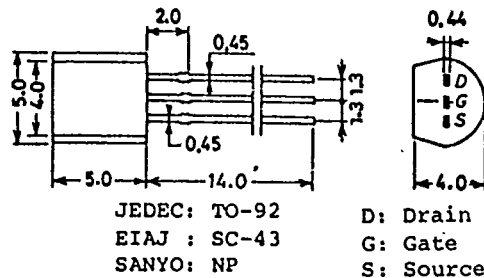
CASE OUTLINES OF LEAD FORMED SMALL SIGNAL TRANSISTORS

- 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.

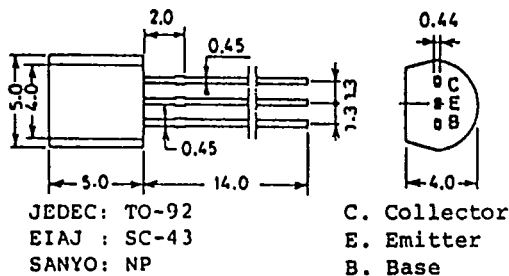
Case Outline—[2003A] unit: mm



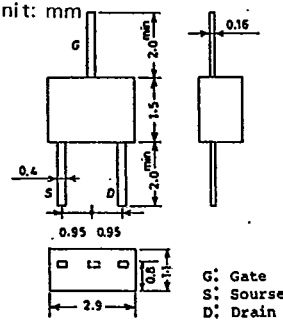
Case Outline—[2019A] unit: mm



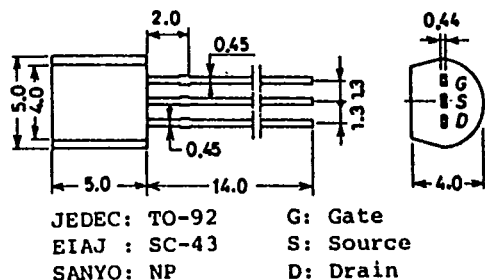
Case Outline—[2004A] unit: mm



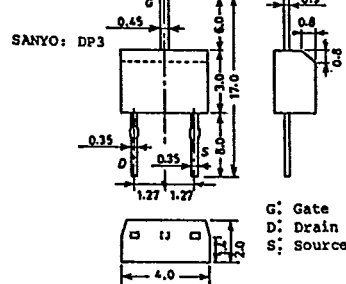
Case Outline—[2025] unit: mm



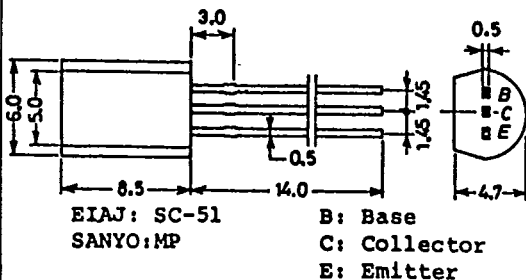
Case Outline—[2005A] unit: mm



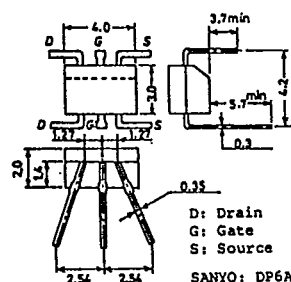
Case Outline—[2026] unit: mm



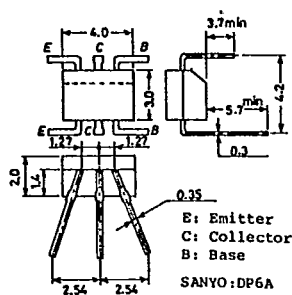
Case Outline—[2006A] unit: mm



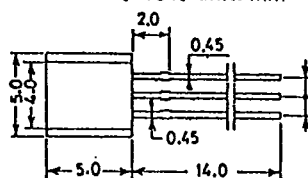
Case Outline—[2027A] unit: mm



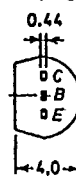
Case Outline—[2029A] unit: mm



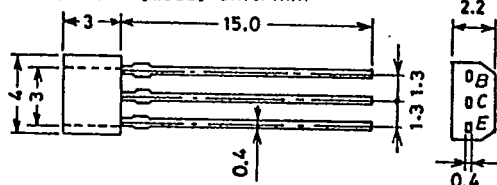
Case Outline—[2061] unit: mm



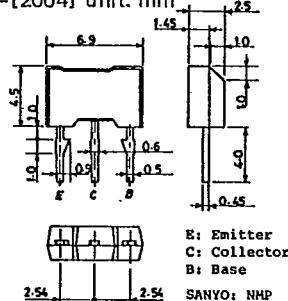
T-91-20



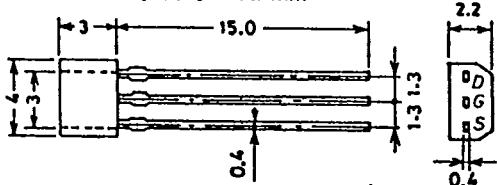
Case Outline—[2033] unit: mm



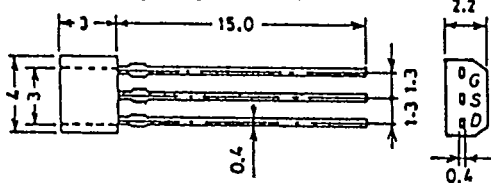
Case Outline—[2064] unit: mm



Case Outline—[2034] unit: mm



Case Outline—[2040] unit: mm



Case Outline—[2051] unit: mm

