

2033



2003A

T-29-17
T-29-19

NPN Epitaxial Planar Silicon Transistors

Small Signal General-Purpose Amp Applications

©333J

Features

- The 2SC536 is classified into 2 types of SPA, NP according to the case outline. The NP type is subclassified into 2 subtypes according to the breakdown voltage.
- Suitable for use in a wide range of applications from low frequency amplification to AM IF amplification.

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

	2SC536SPA	2SC536NP	2SC536KNP	unit	
Collector to Base Voltage	VCBO	40	40	55	V
Collector to Emitter Voltage	VCEO	30	30	50	V
Emitter to Base Voltage	VEBO	5	5	5	V
Collector Current	IC	100	100	100	mA
Peak Collector Current	icp	300	300	300	mA
Collector Dissipation	PC	300	400	400	mW
Junction Temperature	Tj	125	125	125	°C
Storage Temperature	Tstg	-40 to +125	-55 to +125	-55 to +125	°C

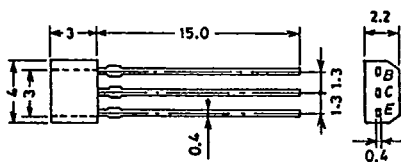
Electrical Characteristics at $T_a=25^\circ\text{C}$

	min	typ	max	unit
Collector Cutoff Current	ICBO	$V_{CB}=35V, I_E=0$	1.0	uA
Emitter Cutoff Current	IEBO	$V_{EB}=4V, I_C=0$	1.0	uA
DC Current Gain	hFE	$V_{CE}=6V, I_C=1mA$	60* 320	960*
Gain-Bandwidth Product	fT	$V_{CE}=6V, I_C=1mA$	100	MHz
Output Capacitance	cob	$V_{CB}=6V, f=1MHz$ [2SC536SPA]	3.0	pF
		[2SC536NP, KNP]	3.5	pF
Collector-Base Time Constant	$\tau_{bb'c}$	$V_{CB}=6V, I_C=1mA, f=31.9MHz$	250	ps
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=50mA, I_B=5mA$	0.5	V

*2SC536 is graded as follows by hFE at 1mA.

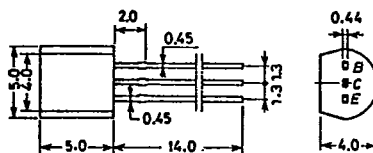
60 D 120	100 E 200	160 F 320	280 G 560	480 H 960
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Case Outline 2033 (unit:mm)



B: Base
C: Collector
E: Emitter
SANYO: SPA

Case Outline 2003A (unit:mm)



JEDEC: TO-92
EIAJ: SC-43
SANYO: NP
B. Base
C. Collector
E. Emitter

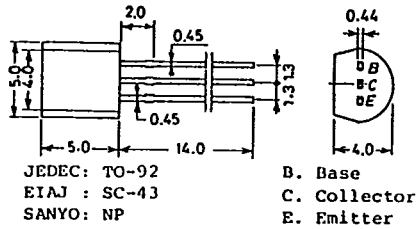
◆ The 2SC536K is scheduled to be discontinued soon. Use the 2SC3330, instead of the 2SC536K, in new applications where you are planning to use the 2SC536K.

T-91-20

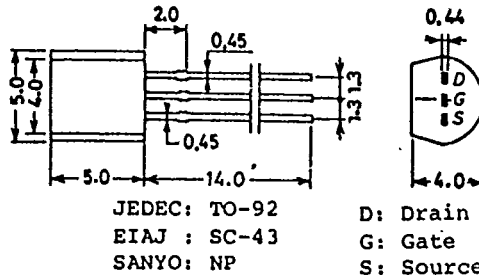
CASE OUTLINES OF LEAD FORMED SMALL SIGNAL TRANSISTORS

- 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.

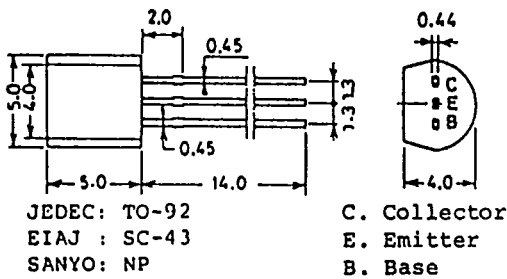
Case Outline-[2003A] unit: mm



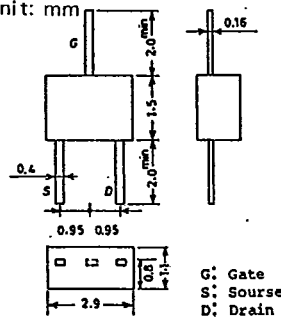
Case Outline-[2019A] unit: mm



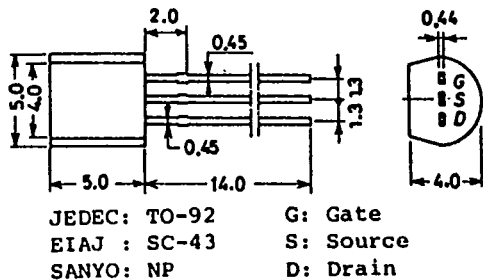
Case Outline-[2004A] unit: mm



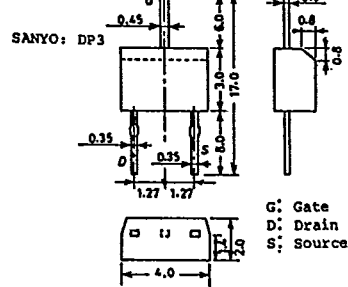
Case Outline-[2025] unit: mm



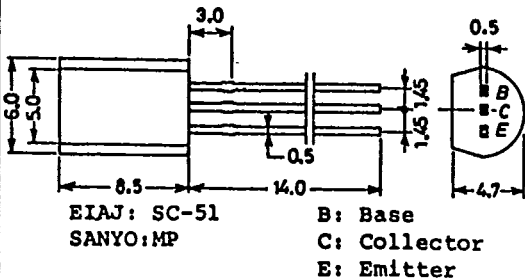
Case Outline-[2005A] unit: mm



Case Outline-[2026] unit: mm



Case Outline-[2006A] unit: mm



Case Outline-[2027A] unit: mm

