2SC536, 536K

T-29-17
T-29-19

2033 2003A

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°C

		2SC536SPA	2SC536NP	2SC536KNP	unit
Collector to Base Voltage	V_{CBO}	40	40	55	V
Collector to Emitter Voltage	V_{CEO}	30	30	50	V
Emitter to Base Voltage	V_{EBO}	5	5	5	V
Collector Current	I_C	100	100	100	mA
Peak Collector Current	i_{cp}	300	300	300	mA
Collector Dissipation	P_C	300	400	400	mW
Junction Temperature	T_j	125	125	125	°C
Storage Temperature	T_{stg}	-40 to +125	-55 to +125	-55 to +125	°C

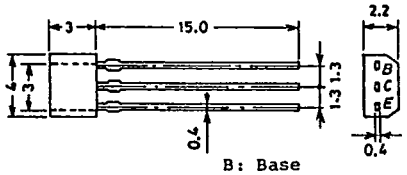
Electrical Characteristics at T_a=25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	V_{CB}=35V, I_E=0			1.0	uA
Emitter Cutoff Current	I_{EBO}	V_{EB}=4V, I_C=0			1.0	uA
DC Current Gain	h_{FE}	V_{CE}=6V, I_C=1mA	60*	320	960*	
Gain-Bandwidth Product	f_T	V_{CE}=6V, I_C=1mA		100		MHz
Output Capacitance	c_{ob}	V_{CB}=6V, f=1MHz [2SC536SPA]		3.0		pF
		[2SC536NP, KNP]		3.5		pF
Collector-Base Time Constant	$r_{bb'}c_c$	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 h_{FE} at 1mA.

60 D 120	100 E 200	160 F 320	280 G 560	480 H 960

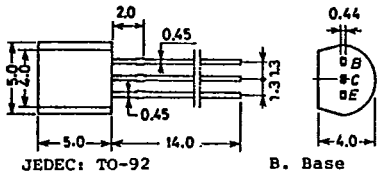
Case Outline 2033
(unit:mm)



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

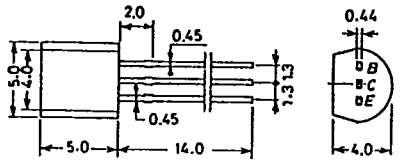
◆ The 2SC536K is scheduled to be discontinued soon. Use the 2SC3330, instend of the 2SC536K, in new applications where you are planning to use the 2SC536K.

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.

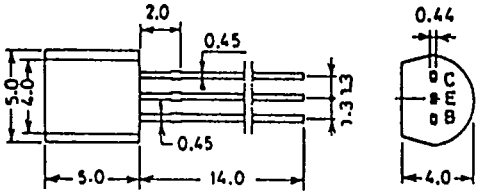
Case Outline—[2003A] unit: mm



JEDEC: TO-92
EIAJ : SC-43
SANYO: NP

B. Base
C. Collector
E. Emitter

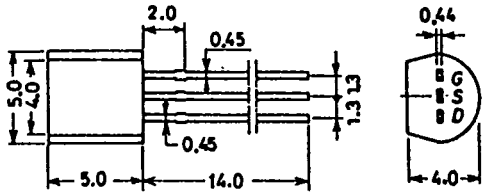
Case Outline—[2004A] unit: mm



JEDEC: TO-92
EIAJ : SC-43
SANYO: NP

C. Collector
E. Emitter
B. Base

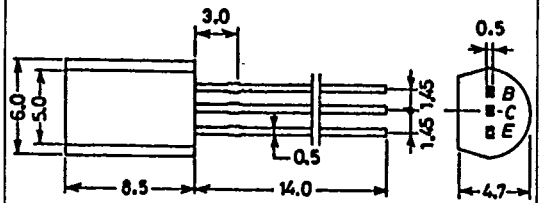
Case Outline—[2005A] unit: mm



JEDEC: TO-92
EIAJ : SC-43
SANYO: NP

G: Gate
S: Source
D: Drain

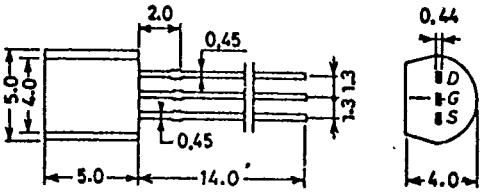
Case Outline—[2006A] unit: mm



EIAJ: SC-51
SANYO:MP

B: Base
C: Collector
E: Emitter

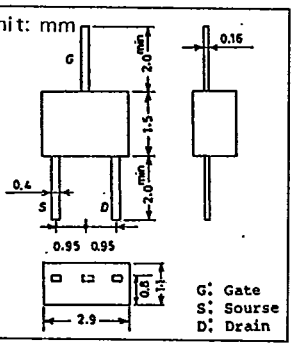
Case Outline—[2019A] unit: mm



JEDEC: TO-92
EIAJ : SC-43
SANYO: NP

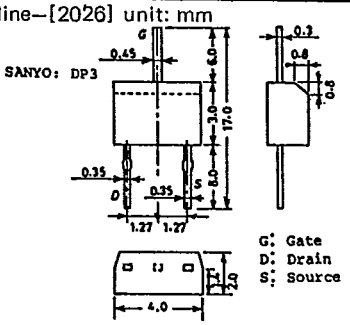
D: Drain
G: Gate
S: Source

Case Outline—[2025] unit: mm



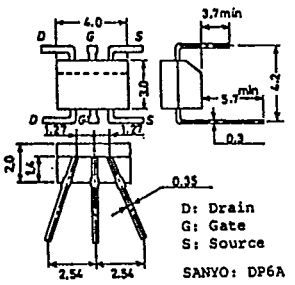
G: Gate
S: Sourse
D: Drain

Case Outline—[2026] unit: mm



G: Gate
D: Drain
S: Source

Case Outline—[2027A] unit: mm



D: Drain
G: Gate
S: Source

SANYO: DP6A

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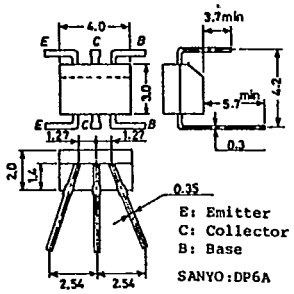
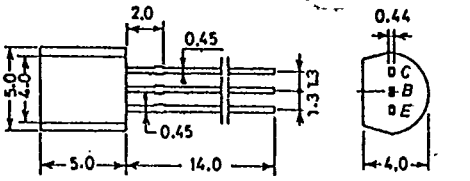
Case Outline—[2029A] unit: mm



E: Emitter
C: Collector
B: Base
SANYO:DP6A

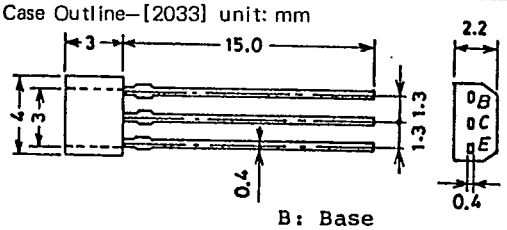
Case Outline—[2061] unit: mm



JEDEC: TO-92
EIAJ : SC-43

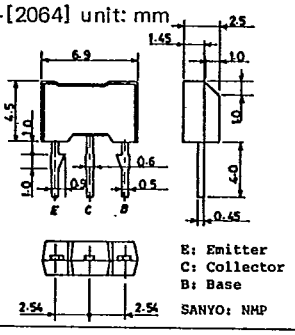
C: Collector
B: Base
E: Emitter
SANYO: NP

Case Outline—[2033] unit: mm



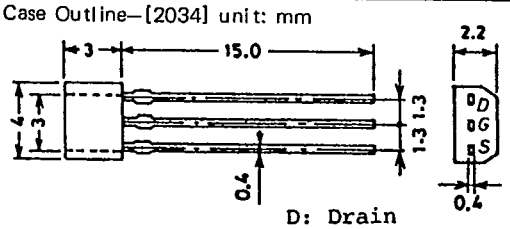
B: Base
C: Collector
E: Emitter
SANYO: SPA

Case Outline—[2064] unit: mm



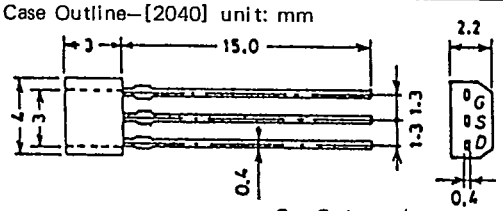
E: Emitter
C: Collector
B: Base
SANYO: NMP

Case Outline—[2034] unit: mm



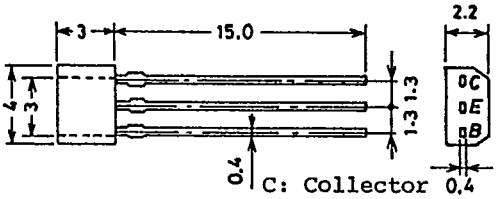
D: Drain
G: Gate
S: Source
SANYO: SPA

Case Outline—[2040] unit: mm



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

Case Outline—[2051] unit: mm



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