

T-31-21

2003A

PNP Epitaxial Planar Silicon Transistor

Color TV Chroma Output, High-Voltage Driver Applications

©3103A

Features

- High breakdown voltage
- Small reverse transfer capacitance and excellent high frequency characteristics
- Adoption of FBET process

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

			unit
Collector to Base Voltage	V_{CB0}	-300	V
Collector to Emitter Voltage	V_{CE0}	-300	V
Emitter to Base Voltage	V_{EB0}	-5	V
Collector Current	I_C	-100	mA
Peak Collector Current	i_{cp}	-200	mA
Collector Dissipation	P_C	500	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

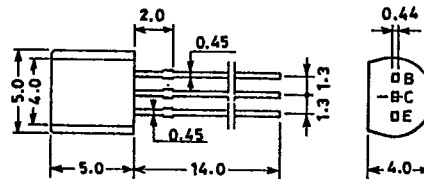
Electrical Characteristics at $T_a = 25^\circ\text{C}$

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = -200\text{V}, I_E = 0$			-0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$			-0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = -10\text{V}, I_C = -1\text{mA}$	60*		320*	
Gain-Bandwidth Product	f_T	$V_{CE} = -30\text{V}, I_C = -10\text{mA}$		70		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = -10\text{mA}, I_B = -1\text{mA}$			-0.6	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = -10\text{mA}, I_B = -1\text{mA}$			-1.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu\text{A}, I_E = 0$	-300			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, R_{BE} = \infty$	-300			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -10\mu\text{A}, I_C = \infty$	-5			V
Output Capacitance	c_{ob}	$V_{CB} = -30\text{V}, f = 1\text{MHz}$			2.4	pF
Reverse Transfer Capacitance	c_{re}	$V_{CB} = -30\text{V}, f = 1\text{MHz}$			1.5	pF

*: The 2SA1624 is classified by 1mA h_{FE} as follows:

60	D	120	100	E	200	160	F	320
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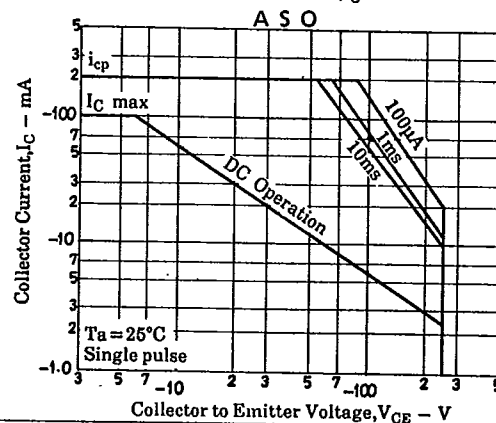
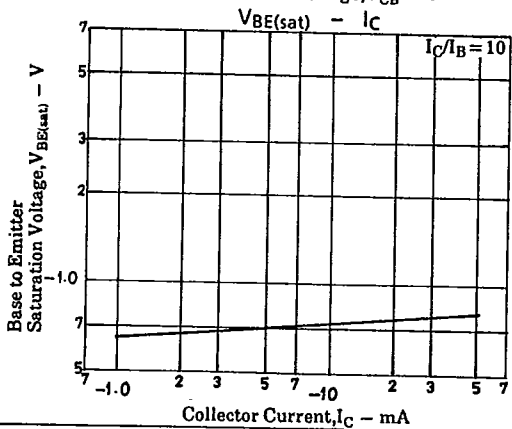
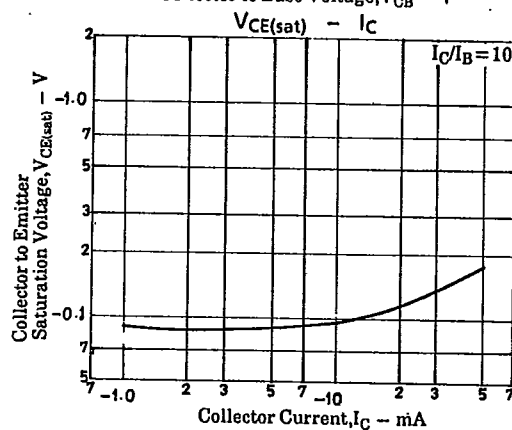
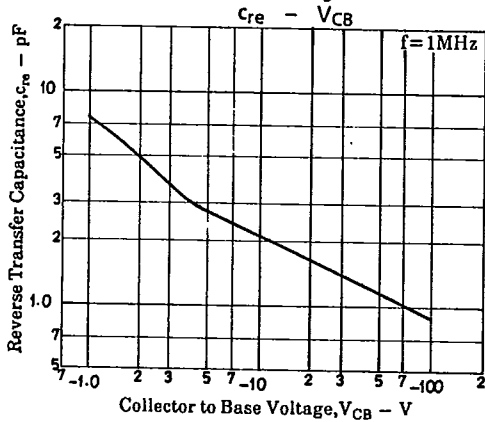
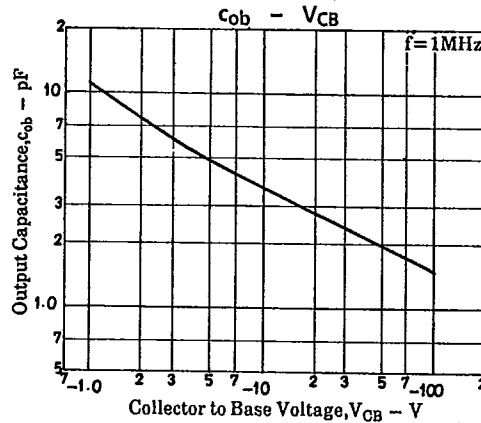
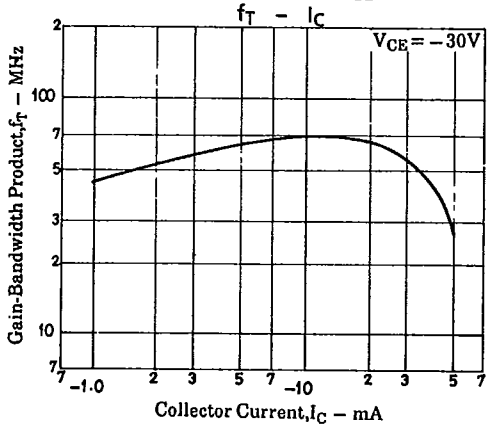
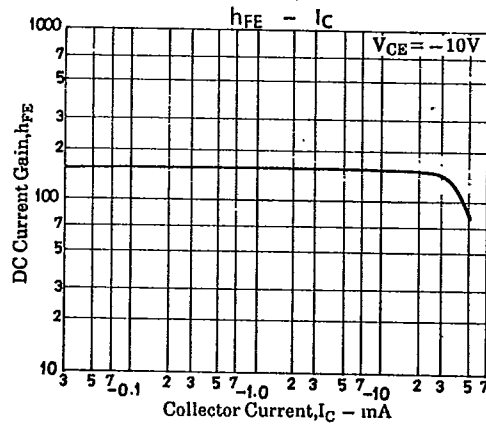
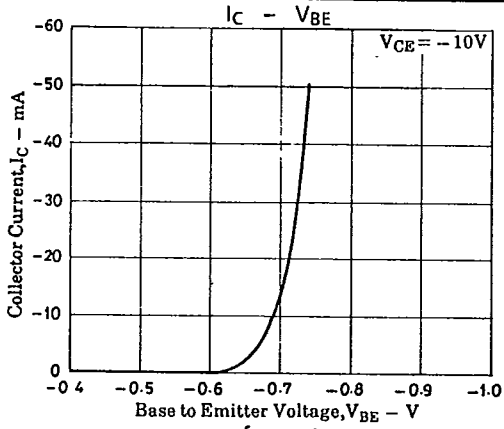
Case Outline 2003A
(unit: mm)



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

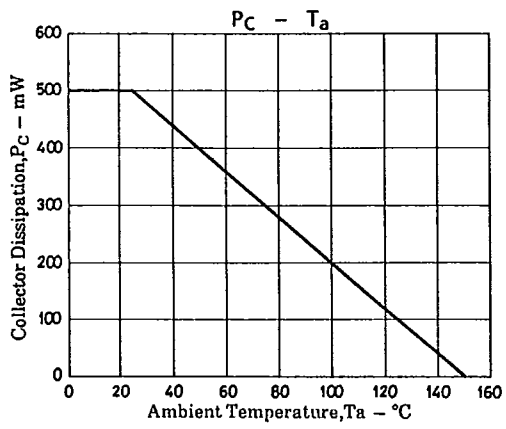
B: Base
C: Collector
E: Emitter

5070MO/N149MO,TS No.3103-1/3



2SA1624

T-31-21

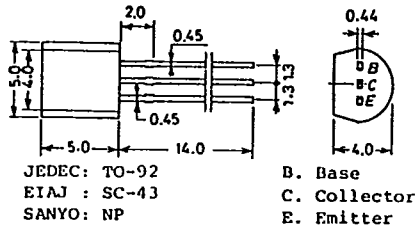


T-91-20

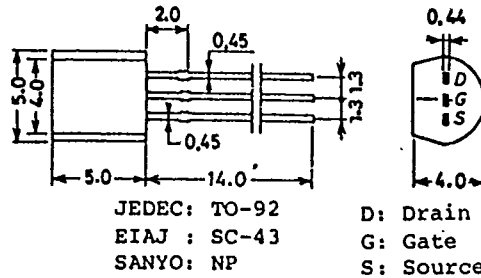
CASE OUTLINES OF LEAD FORMED SMALL SIGNAL TRANSISTORS

- 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.

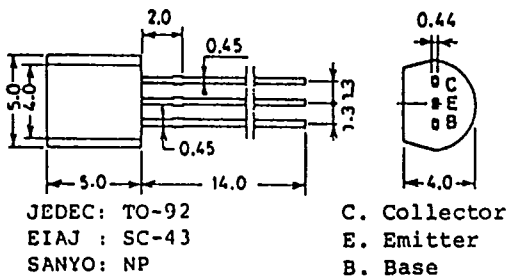
Case Outline-[2003A] unit: mm



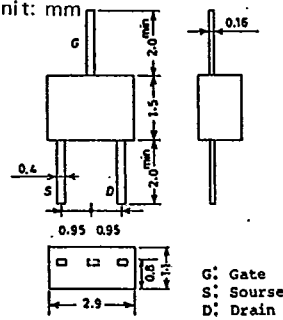
Case Outline-[2019A] unit: mm



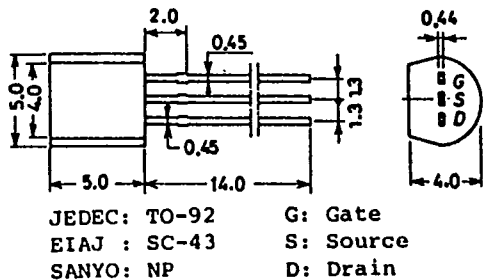
Case Outline-[2004A] unit: mm



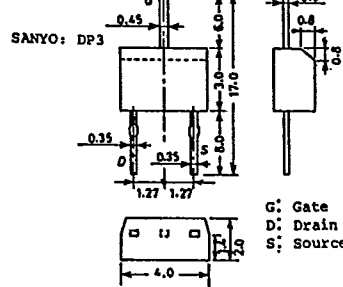
Case Outline-[2025] unit: mm



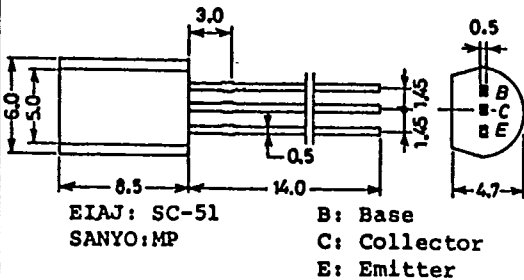
Case Outline-[2005A] unit: mm



Case Outline-[2026] unit: mm



Case Outline-[2006A] unit: mm



Case Outline-[2027A] unit: mm

