

2SA984
984K
2SC2274
2274K



2003A

PNP/NPN Epitaxial Planar
Silicon Transistors

T-29-21

Low-Frequency Power Amp Applications

©465F

Features

- High breakdown voltage ($V_{CE0} \geq 50/80V$).
- High current ($I_C = 500mA$).
- Low saturation voltage.

(): 2SA984, 984K

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

	A984, C2274	A984K, C2274K	unit	
Collector to Base Voltage	V_{CBO}	(-) 60	(-) 100	V
Collector to Emitter Voltage	V_{CEO}	(-) 50	(-) 80	V
Emitter to Base Voltage	V_{EBO}	(-) 5		V
Collector Current	I_C	(-) 500		mA
Peak Collector Current	i_{cp}	(-) 800		mA
Collector Dissipation	P_C	600		mW
Junction Temperature	T_j	150		$^\circ C$
Storage Temperature	T_{stg}	-55 to +150		$^\circ C$

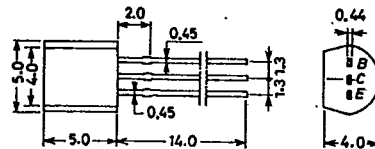
Electrical characteristics at $T_a = 25^\circ C$

		min	typ	max	unit
Collector Cutoff Current	I_{CBO} $V_{CB} = (-) 40V, I_E = 0$			(-) 1.0	μA
Emitter Cutoff Current	I_{EBO} $V_{EB} = (-) 4V, I_C = 0$			(-) 1.0	μA
DC Current Gain	$h_{FE}(1)$ $V_{CE} = (-) 5V, I_C = (-) 50mA$		60*	320*	
	$h_{FE}(2)$ $V_{CE} = (-) 5V, I_C = (-) 400mA$ (pulse)		35		
Gain-Bandwidth Product	f_T $V_{CE} = (-) 10V, I_C = (-) 10mA$			120	MHz
Output Capacitance	c_{ob} $V_{CB} = (-) 10V, f = 1MHz$			(9)	pF
				5	pF
C-E Saturation Voltage	$V_{CE}(sat)$ $I_C = (-) 400mA, I_B = (-) 40mA$			(-0.25) (-0.6)	V
B-E Saturation Voltage	$V_{BE}(sat)$ " "			0.2 0.6	V
C-B Breakdown Voltage	$V(BR)_{CBO}$ $I_C = (-) 10\mu A, I_E = 0$			(-) 0.9 (-) 1.2	V
				A984, C2274 (-) 60	V
				A984K, C2274K (-) 100	V
C-E Breakdown Voltage	$V(BR)_{CEO}$ $I_C = (-) 1mA, R_{BE} = \infty$			(-) 50	V
				A984, C2274 (-) 50	V
				A984K, C2274K (-) 80	V
E-B Breakdown Voltage	$V(BR)_{EBO}$ $I_E = (-) 10\mu A, I_C = 0$			(-) 5	V

* The 2SA984, K, 2SC2274, K are classified by 50mA h_{FE} as follows.

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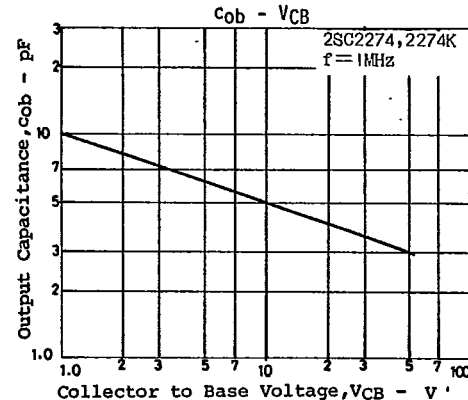
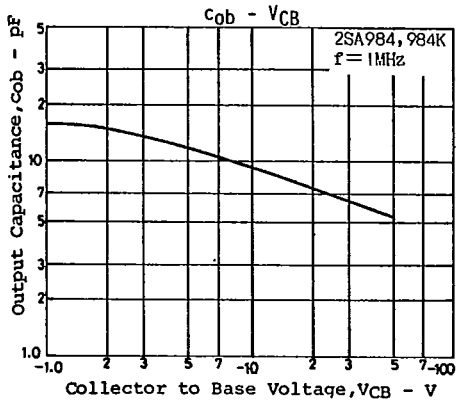
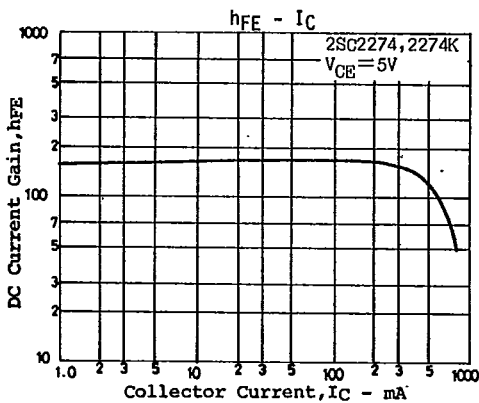
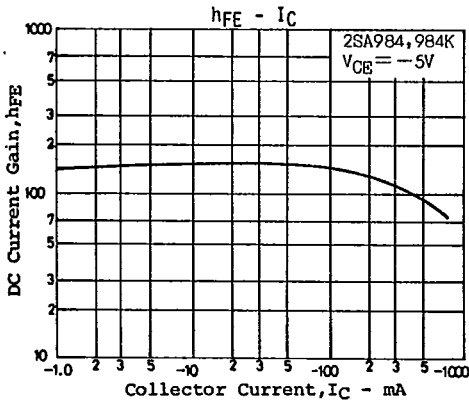
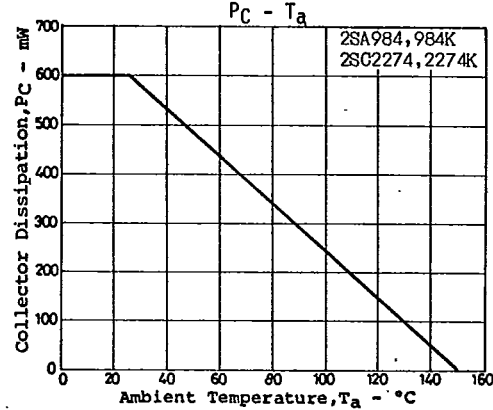
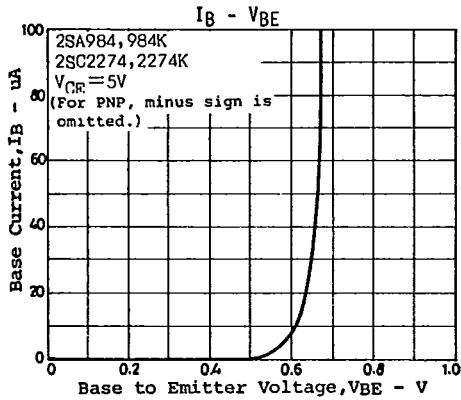
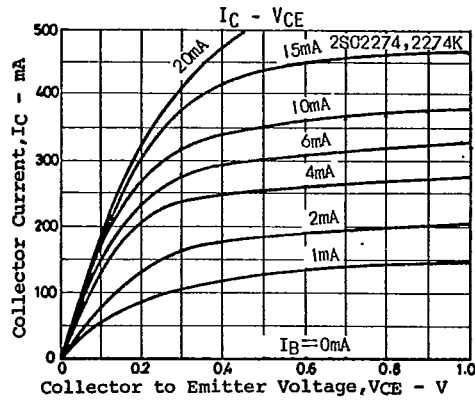
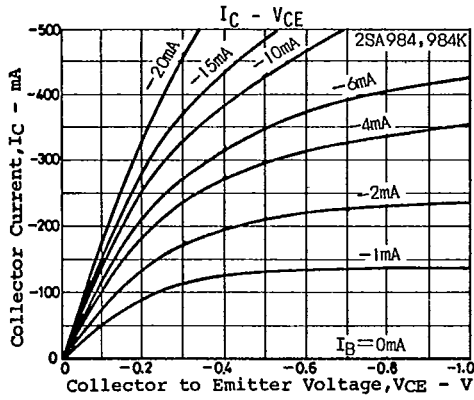
Case Outline 2003A (unit:mm)



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

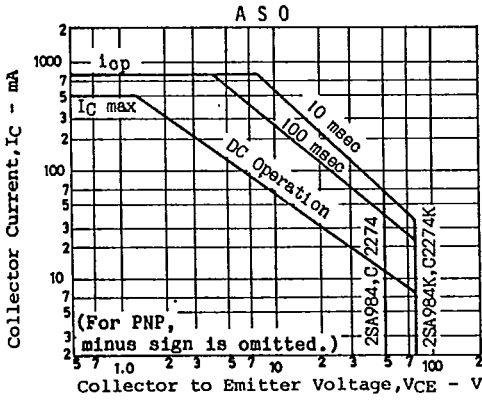
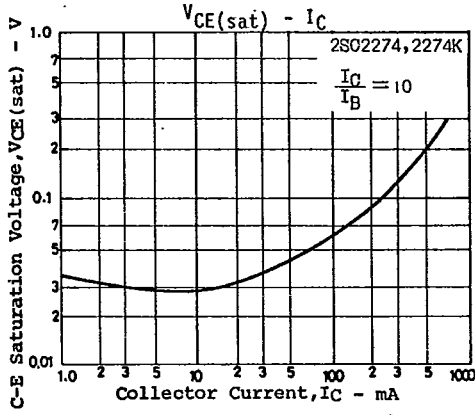
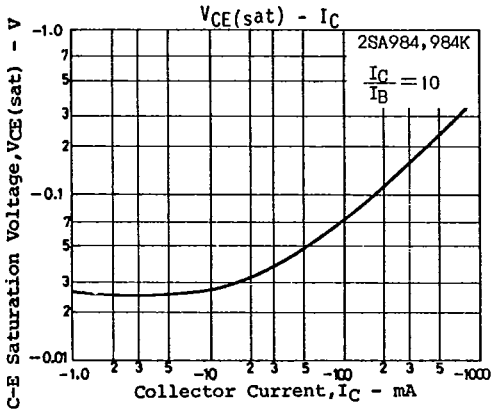
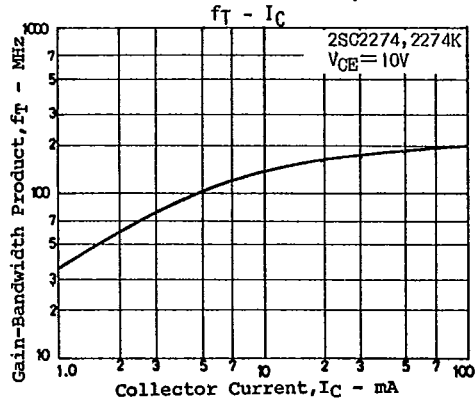
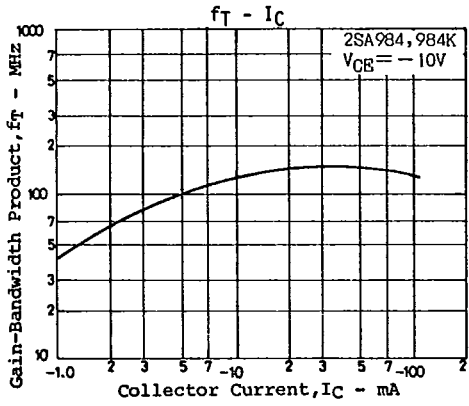
The 2SC2274K is scheduled to be discontinued soon. Use the 2SC3708, instead of the 2SC2274K, in new applications where you are planning to use the 2SC2274K.

3187AT/3155MY, TS No. 465-1/3



2SA984,984K/2SC2274,2274K

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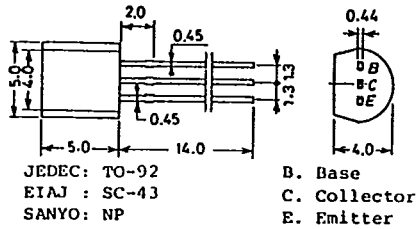


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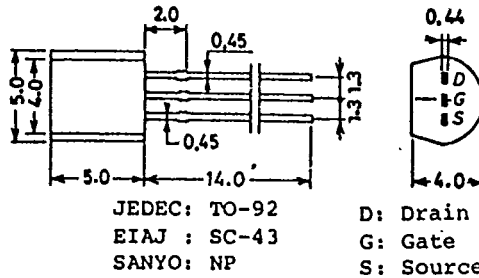
CASE OUTLINES OF LEAD FORMED SMALL SIGNAL TRANSISTORS

- 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.

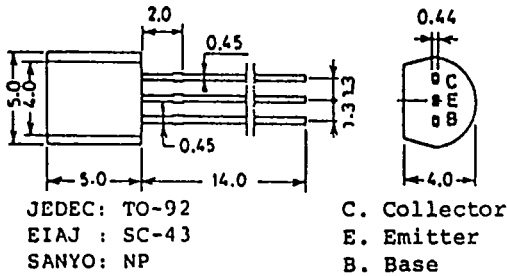
Case Outline-[2003A] unit: mm



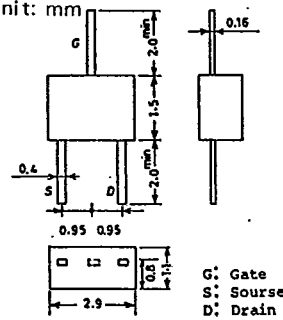
Case Outline-[2019A] unit: mm



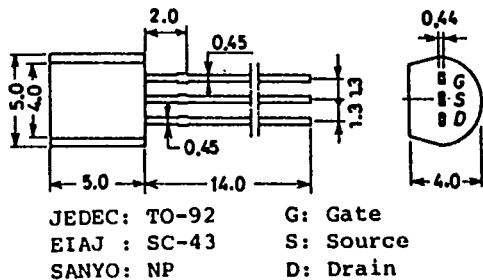
Case Outline-[2004A] unit: mm



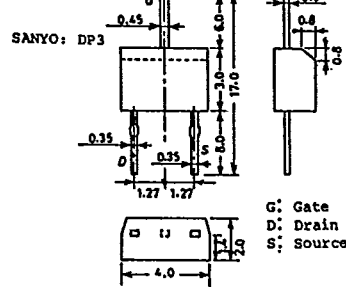
Case Outline-[2025] unit: mm



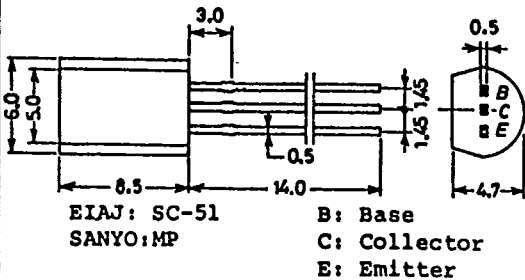
Case Outline-[2005A] unit: mm



Case Outline-[2026] unit: mm



Case Outline-[2006A] unit: mm



Case Outline-[2027A] unit: mm

