

# 2SA984, 984K



2003A

PNP/NPN Epitaxial Planar  
Silicon Transistors

## 2SC2274, 2274K

# Low Frequency Power Amp Applications

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### 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	$V_{CB0}$	(-) 60	(-) 100	V
Collector to Emitter Voltage	$V_{CE0}$	(-) 50	(-) 80	V
Emitter to Base Voltage	$V_{EBO}$		(-) 5	V
Collector Current	$I_C$	(-) 500		mA
	$i_{cp}$	(-) 800		mA
Collector Dissipation	$P_C$		600	mW
Junction Temperature	$T_j$		150	$^\circ C$
Storage Temperature	$T_{stg}$	-55 to +150		$^\circ C$

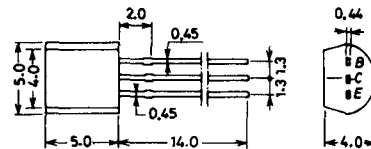
### Electrical characteristics at $T_a = 25^\circ C$

		min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$ $V_{CB} = (-) 40V, I_E = 0$			(-) 1.0	$\mu A$
Emitter Cutoff Current	$I_{EBO}$ $V_{EB} = (-) 4V, I_C = 0$			(-) 1.0	$\mu A$
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		
G-B 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	$V_{(BR)CEO}$ ( $I_C = (-) 1mA, R_{BE} = open$ )			(-) 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

For details, refer to the description of the 2SC2274, 2274K.

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