

# 2SA984, 984K



2003A

PNP/NPN Epitaxial Planar  
Silicon Transistors

## 2SC2274, 2274K

# 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 Ta=25°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
	$i_{cp}$		(-) 800	mA
Collector Dissipation	PC		600	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

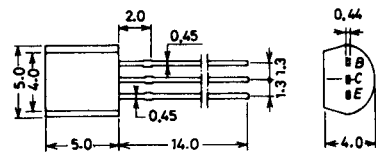
### Electrical characteristics at Ta=25°C

			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = (-) 40V, I_E = 0$			(-) 1.0	uA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = (-) 4V, I_C = 0$			(-) 1.0	uA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = (-) 5V, I_C = (-) 50mA$		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	$V_{(BR)CBO}$	$I_C = (-) 10uA,$ $I_E = 0$			(-) 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
		A984, C2274			(-) 80	V
		A984K, C2274K			(-) 80	V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = (-) 10uA, I_C = 0$			(-) 5	V

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

60	D	120	100	E	200	160	F	320
----	---	-----	-----	---	-----	-----	---	-----

### 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.

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