

**2SA984,  
984K**



2003A

PNP/NPN Epitaxial Planar  
Silicon Transistors

**2SC2274,  
2274K**

(E465F)

## Low Frequency Power Amp Applications

### Features

- . High breakdown voltage ( $V_{CEO} \geq 50/80V$ ) .
- . 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	$(-) 60$	$(-) 100$	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 $P_C$		600	mW
Junction Temperature $T_j$		150	°C
Storage Temperature $T_{stg}$	-55 to +150		°C

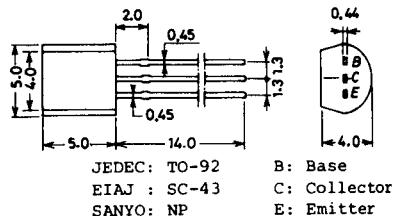
### Electrical characteristics at $T_a=25^\circ C$

		min	typ	max	unit
Collector Cutoff Current $I_{CBO}$	$V_{CB}=(-) 40V, I_E=0$			$(-) 1.0$	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*	
	$h_{FE}(2) V_{CE}=(-) 5V, I_C=(-) 400mA, \text{pulse}$	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	$V_{CE}(\text{sat}) \quad I_C=(-) 400mA, I_B=(-) 40mA$			$(-0.25) (-0.6)$	V
				0.2 0.6	V
B-E Saturation Voltage	$V_{BE}(\text{sat}) \quad " "$			$(-) 0.9 (-) 1.2$	V
C-B Breakdown Voltage	$V_{(BR)CBO} \quad I_C=(-) 10uA, I_E=0$				V
	$A984, C2274 (-) 60$				
	$A984K, C2274K (-) 100$				
C-E Breakdown Voltage	$V_{(BR)CEO} \quad I_C=(-) 1mA, R_{BE}=\text{open}$				V
	$A984, C2274 (-) 50$				
E-B Breakdown Voltage	$V_{(BR)EBO} \quad I_E=(-) 10uA, I_C=0$			$(-) 5$	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  
EIAJ : SC-43  
SANYO: NP

B: Base  
C: Collector  
E: Emitter

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

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