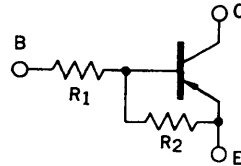


DESCRIPTION The AN1F4N is designed for use in medium speed switching circuit.

FEATURE • Bias resistors built-in type PNP transistor equivalent circuit.



$R_1 = 22 \text{ k}\Omega$
 $R_2 = 47 \text{ k}\Omega$

ABSOLUTE MAXIMUM RATINGS

Maximum Temperatures

Storage Temperature -55 to $+150$ °C

Junction Temperature 150 °C Maximum

Maximum Power Dissipation ($T_a = 25$ °C)

Total Power Dissipation 300 mW

Maximum Voltages and Currents ($T_a = 25$ °C)

V_{CBO} Collector to Base Voltage -60 V

V_{CEO} Collector to Emitter Voltage -50 V

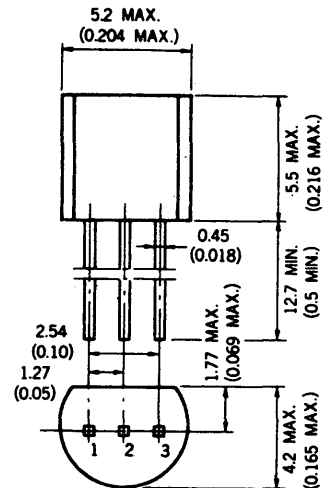
V_{EBO} Emitter to Base Voltage -5.0 V

$I_{C(DC)}$ Collector Current (DC) -100 mA

$I_{C(pulse)}$ Collector Current (pulse) -200 mA

PACKAGE DIMENSIONS

in millimeters (inches)



1. EMITTER EIAJ : SC-43B
2. COLLECTOR JEDEC : TO-92
3. BASE IEC : PA33

ELECTRICAL CHARACTERISTICS ($T_a = 25$ °C)

SYMBOL	CHARACTERISTIC	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
R_1	Input Resistance	15.4	22.0	28.6	$\text{k}\Omega$	
R_2	Input Resistance	32.9	47.0	61.1	$\text{k}\Omega$	
V_{IL}	Low Level Input Voltage		-0.85	-0.6	V	$V_{CE} = -5.0$ V, $I_C = -100$ μ A
V_{IH}	Hi Level Input Voltage	-3.0	-1.3		V	$V_{CE} = -0.2$ V, $I_C = -5.0$ mA
t_{on}	Turn On Time		0.2	0.3	μ s	$V_{CC} = -5.0$ V, $R_L = 1.0$ $\text{k}\Omega$, $V_{in} = -5.0$ V, PW = 2 μ s, Duty Cycle ≤ 2 %
t_{stg}	Storage Time		1.5	5.0	μ s	
t_{off}	Turn Off Time		2.0	6.0	μ s	
h_{FE1}	DC Current Gain	85	150	340	—	$V_{CE} = -5.0$ V, $I_C = -5.0$ mA
h_{FE2}	DC Current Gain	95	200		—	$V_{CE} = -5.0$ V, $I_C = -5.0$ mA
$V_{CE(sat)}$	Collector Saturation Voltage		-0.04	-0.2	V	$I_C = -5.0$ mA, $I_B = -0.25$ mA
I_{CBO}	Collector Cutoff Current			-0.1	μ A	$V_{CB} = -50$ V, $I_E = 0$

TYPICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

