

## 2N4126

## PNP EPITAXIAL SILICON TRANSISTOR

T-29-21

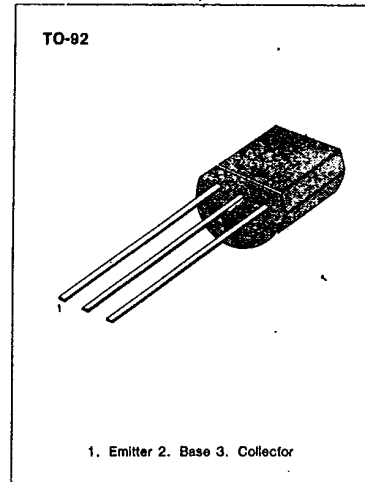
## AMPLIFIER TRANSISTOR

- Collector-Emitter Voltage:  $V_{CE0} = 25V$
- Collector Dissipation:  $P_C (max) = 625mW$

ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ C$ )

Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage	$V_{CE0}$	25	V
Collector-Base Voltage	$V_{CBO}$	25	V
Emitter-Base Voltage	$V_{EBO}$	4	V
Collector Current	$I_C$	200	mA
Collector Dissipation	$P_C$	625	mW
Junction Temperature	$T_J$	150	$^\circ C$
Storage Temperature	$T_{stg}$	-55 - 150	$^\circ C$

- Refer to 2N3906 for graphs

ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
*Collector-Emitter Breakdown Voltage	$BV_{CE0}$	$I_C = 1mA, I_B = 0$	25			V
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_C = 10\mu A, I_E = 0$	25			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E = 10\mu A, I_C = 0$	4			V
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = 20V, I_E = 0$			50	nA
Emitter Cut-off Current	$I_{EBO}$	$V_{BE} = 3V, I_C = 0$			50	nA
*DC Current Gain	$h_{FE}$	$I_C = 2mA, V_{CE} = 1V$	120		360	
		$I_C = 50mA, V_{CE} = 1V$	60			
*Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 50mA, I_B = 5mA$			0.4	V
*Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 50mA, I_B = 5mA$			0.95	V
Current Gain Bandwidth Product	$f_T$	$I_C = 10mA, V_{CE} = 20V$ $f = 100MHz$	250			MHz
Collector Base Capacitance	$C_{cb}$	$V_{CB} = 5V, I_E = 0$ $f = 1MHz$			4.5	pF
Noise Figure	NF	$I_C = 100\mu A, V_{CE} = 5V$ $R_G = 1K\Omega$ Noise Bandwidth = 10Hz to 15.7KHz			4	dB

- \* Pulse Test: Pulse Width  $\leq 300\mu s$ , Duty Cycle  $\leq 2\%$