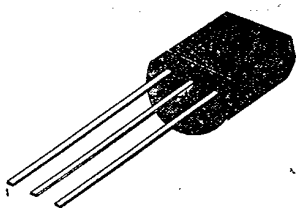
2N4125 PNP EPITAXIAL SILICON TRANSISTOR

T-29-21

AMPLIFIER TRANSISTOR

- Collector-Emitter Voltage: V_{CEO}=30 V
- Collector Dissipation: P_C (max)=625mW

TO-92



1. Emitter 2. Base 3. Collector

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CEO}	30	V
Collector-Base Voltage	V_{CBO}	30	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	°C
Storage Temperature	Tstg	−55~150	°C

• Refer to 2N3906 for graphs

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ELECTRICAL CHARACTERISTICS (T_a=25°C)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
*Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=1mA, I_B=0	30			V
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=10μA, I_E=0	30			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E=10μA, 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	50		150	
		I_C=50mA, V_{CE}=1V	25			
*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	
Current Gain Bandwidth Product	f_T	I_C=10mA, V_{CE}=20V f=100MHz	200			MHz
Collector Base Capacitance	C_{cb}	V_{CB}=5V, I_E=0 f=1MHz			4.5	pF
Noise Figure	NF	I_C=100μA, V_{CE}=5V R_G=1KΩ Noise Bandwidth= 10Hz to 15.7KHz			5	dB

*Pulse Test: Pulse Width≤300μs, Duty Cycle≤2%