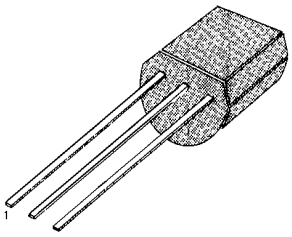
2N5210 NPN EPITAXIAL SILICON TRANSISTOR

AMPLIFIER TRANSISTOR

- Collector-Emitter Voltage: V_{CEO}= 50V
- Collector Dissipation: P_C (max)=625mW

TO-92



1.Emitter 2. Base 3. Collector

ABSOLUTE MAXIMUM RATINGS (T_A=25℃)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	4.5	V
Collector Current	I_C	50	mA
Collector Dissipation	P_C	625	mW
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55 ~ 150	℃

- Refer to 2N5088 for graphs

ELECTRICAL CHARACTERISTICS (T_A=25℃)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=100㎂, I_E=0	50			V
★Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=1mA, I_B=0	50			V
Collector Cut-off Current	I_{CBO}	V_{CB}=35V, I_E=0			50	nA
Emitter Cut-off Current	I_{EBO}	V_{EB}=3V, I_C=0			50	nA
DC Current Gain	h_{FE}	V_{CE}=5V, I_C=100㎂	200		600	
		V_{CE}=5V, I_C=1mA	250			
		★V_{CE}=5V, I_C=10mA	250			
Collector-Emitter Saturation Voltage	V_{CE} (sat)	I_C=10mA, I_B=1mA			0.7	V
Base-Emitter Saturation Voltage	V_{BE} (on)	I_C=1mA, V_{CE}=5V			0.85	V
Collector-Base Capacitance	C_{OB}	V_{CB}=5V, I_E=0 f=100MHz			4	pF
Current Gain Bandwidth Product	f_T	V_{CE}=5V, I_C=500㎂	30			MHz
Noise Figure	N_F	V_{CE}=5V, I_C=20㎂ R_S=22kΩ f=10Hz to 15.7KHz			2	dB
		V_{CE}=5V, I_C=20㎂ R_S=10kΩ, f=1Khz			3	dB

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

SAMSUNG ELECTRONICS