

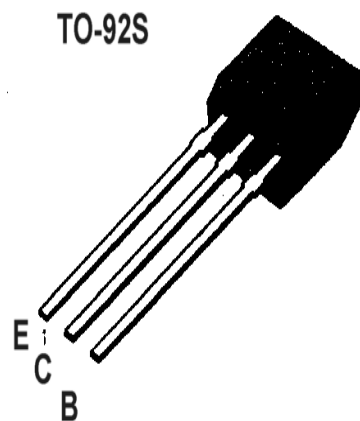
**PNP Transistors**

—PNP Silicon—

■■ APPLICATION: Audio Frequency Amplifier Applicatons.

■■ MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V <sub>CB0</sub>	-50	V
Collector-emitter voltage	V <sub>CEO</sub>	-50	V
Emitter-base voltage	V <sub>EB0</sub>	-5	V
Collector current	I <sub>c</sub>	-0.15	A
Base current	I <sub>b</sub>	-0.05	A
Collector Power Dissipation	P <sub>c</sub>	0.2	W
Junction Temperature	T <sub>j</sub>	125	°C
Storage Temperature Range	T <sub>stg</sub>	-55~125	°C



■■ ELECTRICAL CHARACTERISTICS (Ta=25°C, R<sub>G</sub>=10Ω)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION		
Collector-Base Breakdown Voltage	BV <sub>cbo</sub>	-50			V	I <sub>c</sub> =-50uA	I <sub>e</sub> =0	
Collector-Emitter Breakdown Voltage	BV <sub>ceo</sub>	-50			V	I <sub>c</sub> =-1mA	I <sub>b</sub> =0	
Emitter-Base Breakdown Voltage	BV <sub>ebo</sub>	-5			V	I <sub>e</sub> =-50uA	I <sub>c</sub> =0	
Collector Cut-off Current	I <sub>cbo</sub>			-0.1	uA	V <sub>cb</sub> =-50V	I <sub>e</sub> =0	
Collector-Emitter Saturation Voltage	I <sub>ebo</sub>			-0.1	uA	V <sub>eb</sub> =-5V	I <sub>c</sub> =0	
Collector-Emitter Saturation Voltage	V <sub>ce(sat)</sub>		-0.1	-0.3	V	I <sub>c</sub> =-100mA	I <sub>b</sub> =-10mA	
DC Current Gain	h <sub>FE</sub>	70		400	β	V <sub>ce</sub> =-6V	I <sub>c</sub> =-2mA	
Gain bandwidth product	f <sub>T</sub>	80			MHz	V <sub>ce</sub> =-10V	I <sub>c</sub> =-1mA	f=1MHz
Common Base Output Capacitance	C <sub>ob</sub>		4	7	pF	V <sub>cb</sub> =-10V	I <sub>e</sub> =0	f=1MHz
Noise Figure	NF		1	10	dB	V <sub>ce</sub> =-6V	I <sub>E</sub> =0	f=1MHz

■■ h<sub>FE</sub> Classification And Marking

Print Mark	A1048S		
Classification	O	Y	GR
h <sub>FE</sub>	70~140	120~240	200~400