

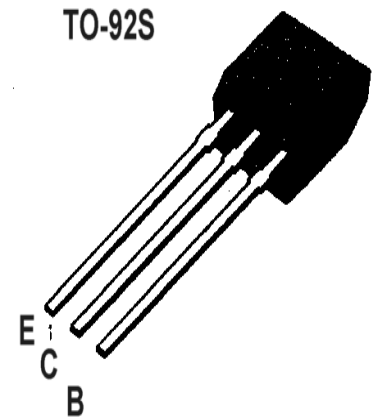
NPN Transistors

—NPN Silicon—

■■ APPLICATION: Audio Frequency Amplifier Applications.

■■ MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V _{CBO}	50	V
Collector-emitter voltage	V _{CEO}	50	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	I _c	0.15	A
Base current	I _b	0.05	A
Collector Power Dissipation	P _c	0.2	W
Junction Temperature	T _j	125	°C
Storage Temperature Range	T _{stg}	-55~125	°C



■■ ELECTRICAL CHARACTERISTICS (Ta=25°C, R_G=10KΩ)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION		
Collector-Base Breakdown Voltage	BV _{cbo}	50			V	I _c =50uA	I _e =0	
Collector-Emitter Breakdown Voltage	BV _{ceo}	50			V	I _c =1mA	I _b =0	
Emitter-Base Breakdown Voltage	BV _{ebo}	5			V	I _e =50uA	I _c =0	
Collector Cut-off Current	I _{cbo}			0.1	uA	V _{cb} =50V	I _e =0	
Emitter Cut-off Current	I _{ebo}			0.1	uA	V _{eb} =5V	I _c =0	
Collector-Emitter Saturation Voltage	V _{ce(sat)}		0.1	0.25	V	I _c =100mA	I _b =10mA	
DC Current Gain	h _{FE}	70		700	β	V _{ce} =6V	I _c =2mA	
Gain bandwidth product	f _T	80			MHz	V _{ce} =10V	I _e =1mA	
Common Base Output Capacitance	C _{ob}		2	3.5	pF	V _{cb} =10V	I _e =0	f=1MHz
Noise Figure	NF		1	10	dB	V _{ce} =6V	I _c =1mA	f=1KHz

■■ h_{FE} Classification And Marking

Print Mark	C2458S			
Classification	O	Y	GR	BL
h _{FE}	70~140	120~240	200~400	350~700