

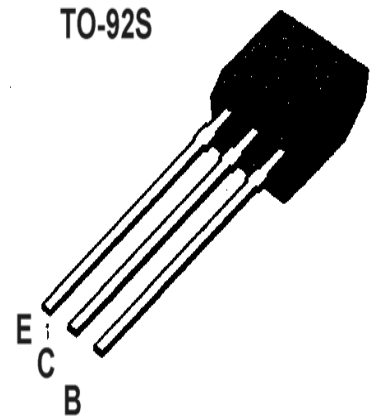
NPN Transistors

—NPN Silicon—

■■ **APPLICATION:** Audio General Purpose Amplifier Applications.

■■ **MAXIMUM RATINGS** (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V _{CBO}	60	V
Collector-emitter voltage	V _{CEO}	50	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	I _C	0.15	A
Collector Power Dissipation	P _C	0.3	W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-55~150	°C



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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION		
Collector-Base Breakdown Voltage	BV _{CBO}	60			V	I _C =20uA	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 =20uA	I _C =0	
Collector Cut-off Current	I _{CBO}			0.1	uA	V _{CB} =60V	I _E =0	
Emitter Cut-off Current	I _{EBO}			0.1	uA	V _{EB} =5V	I _C =0	
Base-Emitter Saturation Voltage	V _{BE(sat)}			1	V	I _C =0.1A	I _B =10mA	
Collector-Emitter Saturation Voltage	V _{CE(sat)}			0.25	V	I _C =0.1A	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 _C =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	C1815			
Classification	O	Y	GR	BL
h _{FE}	70~140	120~240	200~400	350~700