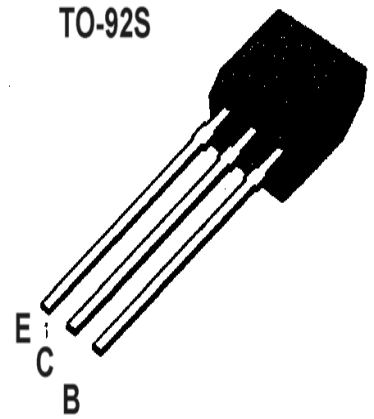


**APPLICATION:** For Driver Stage of AF Amplifier Applications.

**MAXIMUM RATINGS** (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V <sub>CBO</sub>	-60	V
Collector-emitter voltage	V <sub>CEO</sub>	-50	V
Emitter-base voltage	V <sub>EBO</sub>	-5	V
Collector current	I <sub>c</sub>	-0.1	A
Base current	I <sub>b</sub>	-0.02	A
Collector Power Dissipation	P <sub>c</sub>	0.25	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55~150	°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>	-60			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> =-60V	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	
Base-Emitter Voltage	V <sub>BE</sub>	-0.58	-0.62	-0.68	V	V <sub>ce</sub> =-6V	I <sub>c</sub> =-1mA	
Collector-Emitter Saturation Voltage	V <sub>ce(sat)</sub>		-0.18	-0.3	V	I <sub>c</sub> =-100mA	I <sub>b</sub> =-10mA	
DC Current Gain	h <sub>FE</sub>	110		600	β	V <sub>ce</sub> =-6V	I <sub>c</sub> =-1mA	
Gain bandwidth product	f <sub>T</sub>	50	180		MHz	V <sub>ce</sub> =-6V	I <sub>e</sub> =-1mA	
Common Base Output Capacitance	C <sub>ob</sub>		5	6	pF	V <sub>cb</sub> =-10V	I <sub>E</sub> =0f=1MHz	
Noise Figure	NF		6	20	dB	V <sub>ce</sub> =-6V	I <sub>c</sub> =-0.3mAf=100Hz	

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

Print Mark	FR					
Classification	RF	JF	HF	FF	EF	KF
h <sub>FE</sub>	110~180	135~220	170~270	200~320	250~400	300~600