

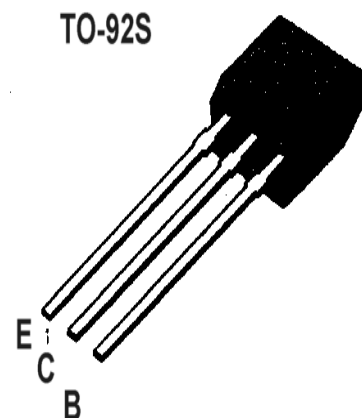
**NPN Transistors**

—NPN Silicon—

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

■ ■ **MAXIMUM RATINGS** (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V <sub>CBO</sub>	180	V
Collector-emitter voltage	V <sub>CEO</sub>	160	V
Emitter-base voltage	V <sub>EBO</sub>	6	V
Collector current	I <sub>C</sub>	0.6	A
Collector Power Dissipation	P <sub>C</sub>	0.3	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>	180			V	I <sub>C</sub> =0.1mA	I <sub>E</sub> =0	
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	160			V	I <sub>C</sub> =1mA	I <sub>B</sub> =0	
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	6			V	I <sub>E</sub> =0.1mA	I <sub>C</sub> =0	
Collector Cut-off Current	I <sub>CBO</sub>			0.1	uA	V <sub>CB</sub> =120V	I <sub>E</sub> =0	
Emitter Cut-off Current	I <sub>EBO</sub>			0.1	uA	V <sub>EB</sub> =4V	I <sub>C</sub> =0	
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>			1	V	I <sub>C</sub> =50mA	I <sub>B</sub> =5mA	
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>			0.5	V	I <sub>C</sub> =50mA	I <sub>B</sub> =5mA	
DC Current Gain	H <sub>FE</sub>	100		300	β	V <sub>CE</sub> =10V	I <sub>C</sub> =150mA	
Gain bandwidth product	f <sub>T</sub>	100			MHz	V <sub>CE</sub> =10V	I <sub>C</sub> =10mA	
Common Base Output Capacitance	C <sub>ob</sub>			6	pF	V <sub>CB</sub> =10V	I <sub>e</sub> =0	f=1MHz
Noise Figure	NF			8	dB	V <sub>CE</sub> =5V, I <sub>C</sub> =0.25A, f=10Hz~15.7KHz, R <sub>g</sub> =1KΩ		

■ ■ **H<sub>FE</sub> Classification And Marking**

Print Mark	2N5551	
Classification		
HFE	80~150	100~250