

**APPLICATION:** General Purpose Amplifier Application.

**MAXIMUM RATING** (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V <sub>CB0</sub>	75	V
Collector-emitter voltage	V <sub>CEO</sub>	40	V
Emitter-base voltage	V <sub>EBO</sub>	6	V
Collector current	I <sub>c</sub>	600	mA
Collector Power Dissipation	P <sub>c</sub>	600	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	- 55~150	°C

**TO-92**



**ELECTRICAL CHARACTERISTICS** (Ta=25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Common Emitter DC Current Gain	h <sub>FE</sub>	100		300		V <sub>CE</sub> = 10 V, I <sub>c</sub> = 150 mA
Collector Cut-off Current	I <sub>CBO</sub>			0.1	μA	V <sub>CB</sub> = 50 V, I <sub>E</sub> =0
Emitter Cut-off Current	I <sub>EBO</sub>			0.1	μA	V <sub>EB</sub> = 5 V, I <sub>c</sub> =0
Collector-Base Breakdown Voltage	BV <sub>CB0</sub>	75			V	I <sub>c</sub> = 0.1 mA, I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	40			V	I <sub>c</sub> = 1 mA, I <sub>B</sub> =0
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	6			V	I <sub>E</sub> = 0.1 mA, I <sub>c</sub> =0
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>			0.3	V	I <sub>c</sub> =150 mA, I <sub>B</sub> = 15 mA
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>			1.3	V	I <sub>c</sub> = 150 mA, I <sub>B</sub> = 15 mA
Gain bandwidth product	f <sub>r</sub>	250			MHz	I <sub>c</sub> = 20 mA, V <sub>CE</sub> = 20 V
Common Base Output Capacitance	C <sub>ob</sub>			8	PF	V <sub>CB</sub> = 10 V, I <sub>E</sub> =0, f = 1 MHz
Turn on Time	t <sub>on</sub>			35	ns	V <sub>CC</sub> = 30 V, I <sub>c</sub> =150 mA, I <sub>B1</sub> =15mA
Turn off Time	t <sub>off</sub>			285	ns	V <sub>CC</sub> = 30 V, I <sub>c</sub> = 150 mA, I <sub>B1</sub> = I <sub>B2</sub> =15mA

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

Classification

h<sub>FE</sub>

100~300