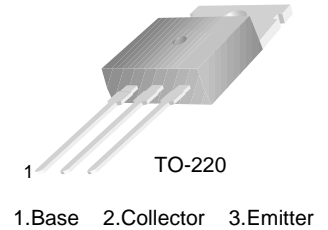


■■ APPLICATION: Medium Power Linear Switching Applications.

■■ MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V <sub>CB0</sub>	60	V
Collector-emitter voltage	V <sub>CEO</sub>	60	V
Emitter-base voltage	V <sub>EBO</sub>	5	V
Collector current	I <sub>c</sub>	3	A
Collector Power Dissipation	P <sub>c</sub>	40	W
Collector Power Dissipation (Ta=25°C)	T <sub>J</sub>	150	°C
Collector Power Dissipation (Tc=25°C)	T <sub>stg</sub>	- 55~150	°C



■■ ELECTRICAL CHARACTERISTICS

(Ta=25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	h <sub>FE</sub>	25				V <sub>CE</sub> =4V, I <sub>c</sub> = 1A
	h <sub>FE</sub>	10		50		V <sub>CE</sub> =4V, I <sub>c</sub> = 3A
Collector Cut-off Current	I <sub>CB0</sub>			300	μA	V <sub>CB</sub> = 30V, I <sub>E</sub> =0
Emitter-Base Cut-off Current	I <sub>EBO</sub>			1	mA	V <sub>EB</sub> = 5V, I <sub>c</sub> =0
Collector-Base Breakdown Voltage	BV <sub>CB0</sub>	60			V	I <sub>c</sub> = 1mA, I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	60			V	I <sub>c</sub> = 30mA, I <sub>B</sub> =0
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	5			V	I <sub>E</sub> = 1mA, I <sub>c</sub> =0
Base-Emitter Voltage	V <sub>BE (on)</sub>			1.8	V	V <sub>CE</sub> = 4V, I <sub>c</sub> = 3A
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>			1.2	V	I <sub>c</sub> = 3A, I <sub>B</sub> = 375mA
Gain bandwidth product	f <sub>T</sub>	3			MHz	I <sub>c</sub> = 500mA, V <sub>CE</sub> = 10V

■■ h<sub>FE</sub> Classification

Classification

h<sub>FE</sub>

10-50