

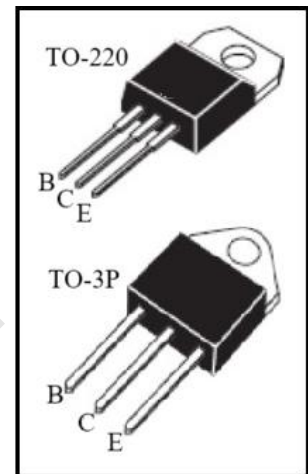
Applications

- energy-saving lamps
- fluorescent lamp electronic ballasts
- other switches and oscillating circuits

Package: TO-220/TO-3P

Maximum Ratings (Ta = 25°)

Parameter	Symbol	Rating		Unit
Collector-base voltage	BV _{CBO}	700		V
Collector-emitter voltage	BV _{CEO}	480		V
Emitter-base voltage	BV _{EBO}	9		V
Collector current	I _{CM}	12		A
Collector Power Dissipation	P _C	TO-220	2	W
		TO-3P	3	
	P _C (T _c = 25°)	TO-220	100	
		TO-3P	130	
Junction Temperature	T _j	150		°C
Storage Temperature	T _{stg}	-55~+150		°C



Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV _{CBO}	I _C =0.1mA, I _E =0	700			V
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =1mA, I _B =0	480			V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E =0.1mA, I _C =0	9			V
collector-base cut-off current	I _{CBO}	V _{CB} =670V, I _E =0			1	μA
collector-emitter cut-off current	I _{CEO}	V _{CE} =450V, I _B =0			10	μA
emitter-base cut-off current	I _{EBO}	V _{EB} =9V, I _C =0			1	μA
DC current gain	H _{FE1}	V _{CE} =5V, I _C =3A	25		35	
	H _{FE2}	V _{CE} =5V, I _C =2mA	10			
collector-emitter saturation voltage	V _{CE(SAT)}	I _C =8A, I _B =1.6A			1.5	V
Base-Emitter Saturation Voltage	V _{BE(SAT)}	I _C =8A, I _B =1.6A			1.5	V
Storage Time	T _S	I _C =500mA	4		6	us
Transition frequency	f _T	V _{CE} =10V, I _C =500mA	4			MHz

Classification of H_{FE}

Rank	B	C	D	E
Range	15-20	20-25	25-30	30-35