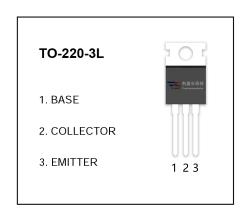


BU406 TRANSISTOR (NPN)

FEATURES

- High Voltage
- Fast Switching Speed: t_f = 750 ns (max)
- Low Saturation Voltage: V_{CE(sat)} = 1 V (max) @ 5 A
- Pb-Free Packages are Available*



MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	400	V
V _{CEO}	Collector-Emitter Voltage	200	V
V _{EBO}	Emitter-Base Voltage	6	V
lc	Collector Current	7	А
Pc	Collector Power Dissipation	2	W
R _{θJA}	Thermal Resistance from Junction to Ambient	62.5	°C/W
T _J ,T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Тур	Max	Unit
Collector-base breakdown voltag	V _{(BR)CBO}	I _C =100uA, I _E =0	400			V
Collector-emitter breakdown voltage	V _{(BR)CEO} *	I _C =100mA,I _B =0	200			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100uA,I _C =0	6			V
Collector cut-off current	I _{CES}	V _{CB} =400V,I _E =0			5	mA
Collector cut-off current	I _{CES}	V _{CB} =250V,I _E =0			1	mA
Collector cut-off current	I _{CBO}	V _{CB} =300V,I _E =0			5	μA
Emitter cut-off current	I _{EBO}	V _{EB} =6V,I _C =0			1	mA
DC current gain	h _{FE}	V _{CE} =5V, I _C =1A	50		100	
Collector-emitter saturation voltage	V _{CE(sat)} *	I _C =5A,I _B =500mA			1	V
Base-emitter saturation voltage	V _{BE(sat)} *	I _C =5A,I _B =500mA			1.2	V
Collector output capacitance	C _{ob}	V _{CB} =10V,I _E =0, f=1MHz		80		pF
Transition frequency	f⊤	V _{CE} =5V,I _C =0.2A,f=10MHz	10			MHz

^{*}Pulse test: pulse width ≤300µs, duty cycle≤ 2.0%.



