

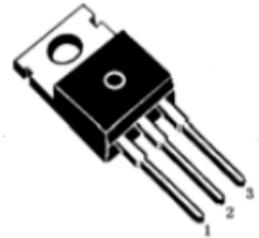
TIP31C
FEATURES

Medium Power Linear Switching Applications

Complementary to TIP32C

Silicon NPN triode

TO-220



1:base 2:collector 3: emitter

Maximum ratings(Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	100	V
Collector-Emitter Voltage	V _{CEO}	100	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current	I _C	3	A
Collector Power Dissipation	P _C	1.25	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55~150	°C

Electrical Characteristics (Ta=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	V _{CBO}	I _C =1mA I _E =0	100		V
Collector-Emitter Sustaining Voltage	V _{CEO}	I _C =30mA I _B =0	100		V
Emitter-Base Breakdown Voltage	V _{EBO}	I _E =1mA I _C =0	5		V
Collector Cutoff Current	I _{CEO}	V _{CE} =60V I _B =0		50	uA
Collector Cutoff Current	I _{CBO}	V _{CE} =100V I _B =0		20	uA
Emitter Cutoff Current	I _{EBO}	V _{EB} =5V I _C =0		1	mA
DC Current Gain	HFE(1)	V _{CE} =4V I _C =1A	25		
	HFE(2)	V _{CE} =4V I _C =3A	15	75	
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =3A I _B =375mA		1.2	V
Base-Emitter On Voltage	V _{BE(on)}	V _{CE} =4V I _C =3A		1.8	V
transition frequency	f _t	V _{CE} =10V I _C =500mA f=1MHz	3		MHz