



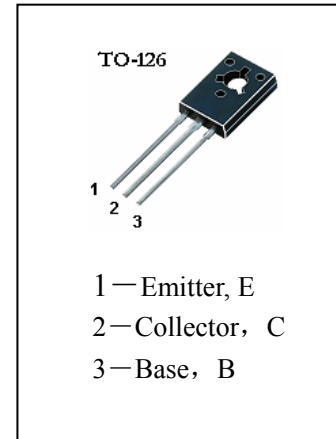
HSBD437

APPLICATIONS

Medium Power Linear switching Applications

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

- T_{stg}—Storage Temperature..... -55~150°C
- T_j—Junction Temperature..... 150°C
- P_C—Collector Dissipation (T_c=25°C) 36W
- V_{CBO}—Collector-Base Voltage..... 45V
- V_{CEO}—Collector-Emitter Voltage..... 45V
- V_{CES}—Collector-Emitter Voltage..... 45V
- V_{EBO}—Emitter-Base Voltage..... 5V
- I_C—Collector Current (Pulse) 7A
- I_C—Collector Current (DC) 4A
- I_B—Base Current.....1A



ELECTRICAL CHARACTERISTICS (T_a=25°C)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
I _{CBO}	Collector Cut-off Current			100	μ A	V _{CB} =45V, I _E =0
I _{EBO}	Emitter-Base Cut-off Current			1	mA	V _{EB} =5V, I _C =0
h _{FE(1)}	DC Current Gain	30	130			V _{CE} =5V, I _C =10mA
*h _{FE(2)}		85	140			V _{CE} =1V, I _C =500mA
*h _{FE(2)}		40				V _{CE} =1V, I _C =2A
*V _{CE(sat)}	Collector-Emitter Saturation Voltage		0.2	0.6	V	I _C =2A, I _B =0.2A
*V _{BE(ON)}	Base-Emitter On Voltage			1.2	V	I _C =2A, V _{CE} =1V
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	45				I _C =100mA, I _B =0
f _T	Current Gain-Bandwidth Product	3			MHz	I _C =250mA, V _{CE} =1V

* Pulse Test:PW=300 μ S, Duty Cycle=1.5% Pulsed