



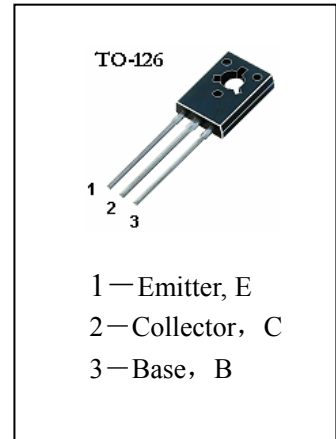
HSBD438

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	140			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