



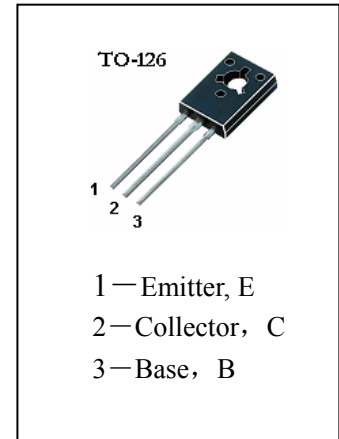
HSBD138

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)	12.5W
P _C	Collector Dissipation (T _A =25°C)	1.25W
V _{CBO}	Collector-Base Voltage	-60V
V _{CEO}	Collector-Emitter Voltage	-60V
V _{EBO}	Emitter-Base Voltage	-5V
I _C	Collector Current (Pulse)	-3A
I _C	Collector Current (DC)	-1.5A
I _B	Base Current	-0.5A



ELECTRICAL CHARACTERISTICS (T_a=25°C)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
I _{CBO}	Collector Cut-off Current			-0.1	μ A	V _{CB} =-30V, I _E =0
I _{EBO}	Emitter-Base Cut-off Current			-10	μ A	V _{EB} =-5V, I _C =0
h _{FE(1)}	DC Current Gain	25				V _{CE} =-2V, I _C =-5mA
h _{FE(2)}		25				V _{CE} =-2V, I _C =-0.5A
h _{FE(3)}		40		250		V _{CE} =-2V, I _C =-150mA
V _{CE(sat)}	Collector-Emitter Saturation Voltage			-0.5	V	I _C =-500mA, I _B =-50mA
V _{BE(ON)}	Base-Emitter On Voltage			-1.0	V	I _C =-0.5A, V _{CE} =-2V
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	-60				I _C =-30mA, I _B =0

h_{FE(3)} Classification

Classification	6	10	16
h _{FE(3)}	40~100	63~160	100~250