Shantou Huashan Electronic Devices Co.,Ltd.

PNP SILICON TRANSISTOR

HSBD380

APPLICATIONS

Medium Power Linear switching Applications

1—Emitter, E
2—Collector，C
3—Base，B

ABSOLUTE MAXIMUM RATINGS（T_a=25℃）

T_{stg}——Storage Temperature…… -55~150℃

T_j——Junction Temperature…… 150℃

P_C——Collector Dissipation（T_c=25℃）…… 25W

V_{CBO}——Collector-Base Voltage…… -100V

V_{CEO}——Collector-Emitter Voltage…… -80V

V_{EBO}——Emitter-Base Voltage…… -5V

I_C——Collector Current(Pulse)…… -3A

I_C——Collector Current（DC）…… -2A

Ib——Base Current……-1A

ELECTRICAL CHARACTERISTICS（T_a=25℃）

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
I_{CBO}	Collector Cut-off Current			-2	μA	V_{CB}=-80V, I_E=0
I_{EBO}	Emitter Cut-off Current			-100	μA	V_{EB}=-5V, I_C=0
*H_{FE} (1)	DC Current Gain	40		375		V_{CE}=-2V, I_C=-150mA
*H_{FE} (2)	DC Current Gain	20				V_{CE}=-2V, I_C=-1A
*$V_{CE(sat)}$	Collector- Emitter Saturation Voltage			-1	V	I_C=-1A, I_B=-0.1A
*$V_{BE(on)}$	Base-Emitter On Voltage			-1.5	V	V_{CE}=-2V, I_C=-1A
$V_{CEO(sus)}$	Collector-Emitter Sustaining Voltage	-80			V	I_C=-100mA, I_B=0
BV_{CBO}	Collector-Base Breakdown Voltage	-100			V	I_C=-100μA, I_E=0
t_{ON}	Turn-On Time		50		nS	V_{CC}=-30V, I_C=-0.5A
t_{OFF}	Turn-Off Time		500		nS	I_{B1}=-I_{B2}=-0.05A

* Pulse Test:PW=350μS,Duty Cycle=2% Pulsed

$h_{FE(3)}$ Classification

Cassification	6	10	16	25
$h_{FE(3)}$	40~100	63~160	100~250	150~375