Shantou Huashan Electronic Devices Co.,Ltd.

PNP SILICON TRANSISTOR

HP32

APPLICATIONS

Medium Power Linear switching Applications.

ABSOLUTE MAXIMUM RATINGS（T_a=25℃）

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

T_j——Junction Temperature……150℃

P_C——Collector Dissipation（Tc=25℃）……40W

P_C——Collector Dissipation（Ta=25℃）……2W

V_{CBO}——Collector-Base Voltage……-40V

V_{CEO}——Collector-Emitter Voltage……-40V

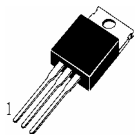
V_{EBO}——Emitter-Base Voltage……-5V

I_C——Collector Current（DC）……-3A

I_C——Collector Current（Pulse）……-5A

Ib——Base Current……-1A

TO-220



1—Base，B
2—Collector，C
3—Emitter，E

ELECTRICAL CHARACTERISTICS（T_a=25℃）

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CEO}	Collector-Emitter Breakdown Voltage	-40			V	I_C=-30mA, I_B=0
H_{FE}（1）	*DC Current Gain	25				V_{CE}=-4V, I_C=-1A
H_{FE}（2）	*DC Current Gain	10		50		V_{CE}=-4V, I_C=-3A
$V_{CE(sat)}$	*Collector- Emitter Saturation Voltage			-1.2	V	I_C=-3A, I_B=-375mA
$V_{BE(ON)}$	*Base-Emitter On Voltage			-1.8	V	V_{CE}=-4V, I_C=-3A
I_{CEO}	Collector Cut-off Current			-0.3	mA	V_{CB}=-30V, I_B=0
I_{CES}	Collector Cut-off Current			-200	μA	V_{CE}=-40V, V_{EB}=0
I_{EBO}	Emitter Cut-off Current			-1	mA	V_{EB}=-5V, I_C=0
f_T	Current Gain-Bandwidth Product	3.0			MHz	V_{CE}=-10V, I_C=-500mA，f=1MHz

*Pulse Test：PW≤300μs，Duty cycle≤2%

Typical Characteristics

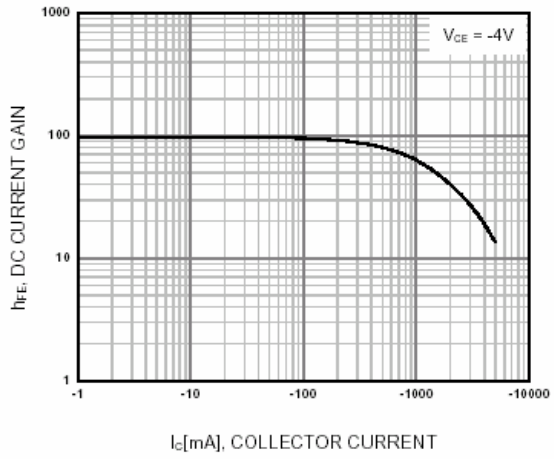


Figure 1. DC current Gain

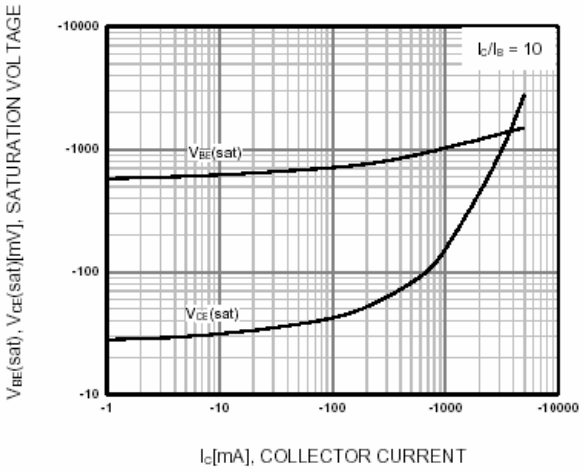


Figure 2. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

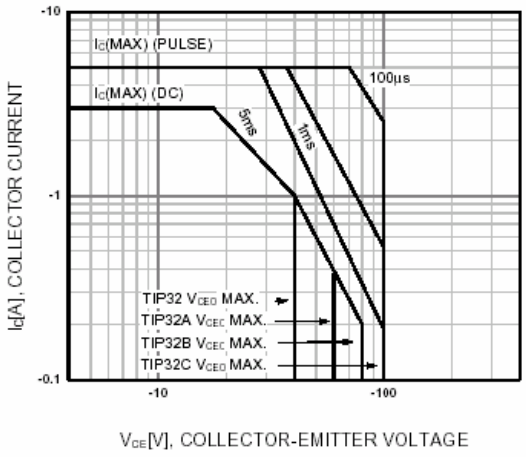


Figure 3. Safe Operating Area

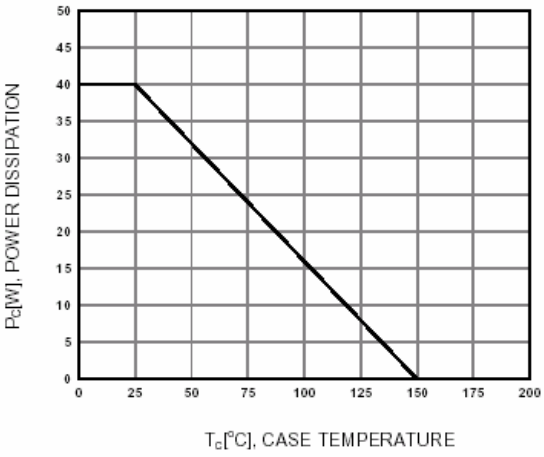


Figure 4. Power Derating