Shantou Huashan Electronic Devices Co.,Ltd.

PNP SILICON TRANSISTOR

HA1695

APPLICATIONS

- Audio and General purpose.
- Complementary to HC4468.

ABSOLUTE MAXIMUM RATINGS（T_a=25℃）

T_{stg}——Storage Temperature…… -65~150℃

T_j——Junction Temperature……150℃

P_C——Collector Dissipation（Tc=25℃）……100W

V_{CBO}——Collector-Base Voltage…… -140V

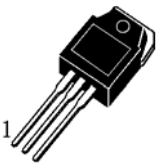
V_{CEO}——Collector-Emitter Voltage…… -140V

V_{EBO}——Emitter-Base Voltage…… -6V

I_C——Collector Current（DC）…… -10A

Ib——Base Current…… -4A

TO-3P



1—Base，B
2—Collector，C
3—Emitter，E

ELECTRICAL CHARACTERISTICS（T_a=25℃）

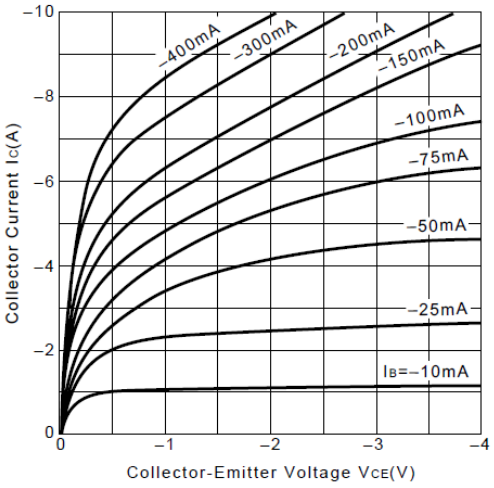
Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CBO}	Collector-Base Breakdown Voltage	−140			V	I_C=-100μA, I_E=0
BV_{CEO}	Collector-Emitter Breakdown Voltage	−140			V	I_C=-50mA, I_B=0
BV_{EBO}	Emitter-Base Breakdown Voltage	−6			V	I_E=-100μA, I_C=0
I_{CBO}	Collector Cut-off Current			−10	μA	V_{CB}=-140V, I_E=0
I_{EBO}	Emitter Cut-off Current			−10	μA	V_{EB}=-6V, I_C=0
H_{FE}（1）	DC Current Gain	50		180		V_{CE}=-4V, I_C=-3A
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage			−0.5	V	I_C=-5A, I_B=-0.5A
f_T	Current Gain-Bandwidth Product		20		MHz	V_{CE}=-12V, I_E=0.5A
Cob	Output Capacitance		400		pF	V_{CB}=-10V, I_E=0, f=1MHz

$h_{FE(1)}$ Classification

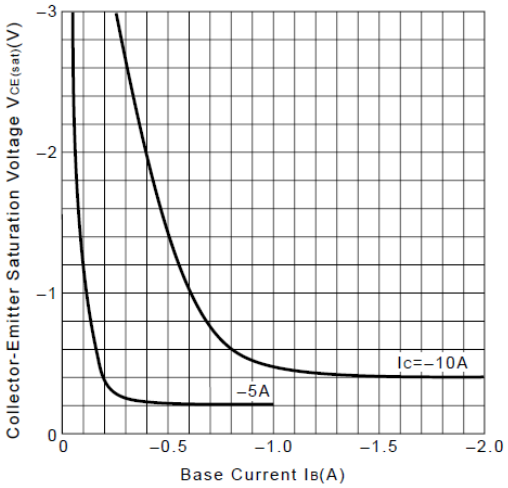
O	P	Y
50 - 100	70 - 140	90 - 180

Typical Characteristics

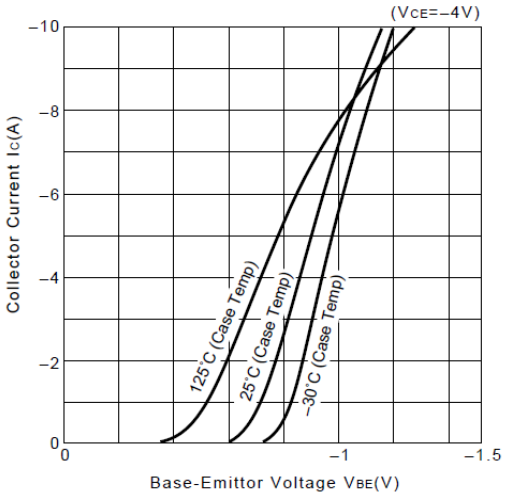
I_C–V_{CE} Characteristics (Typical)



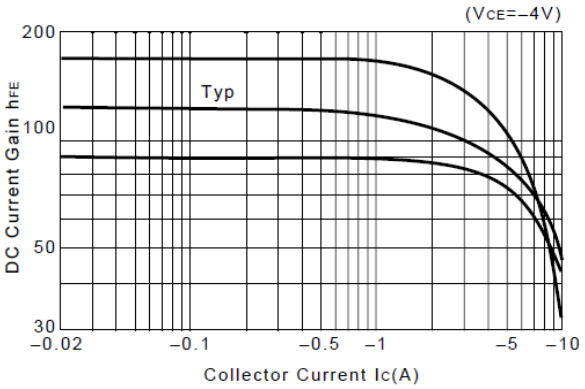
$V_{CE(sat)}$–I_B Characteristics (Typical)



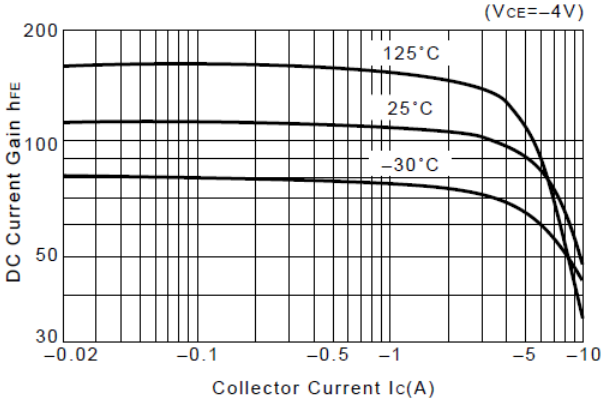
I_C–V_{BE} Temperature Characteristics (Typical)



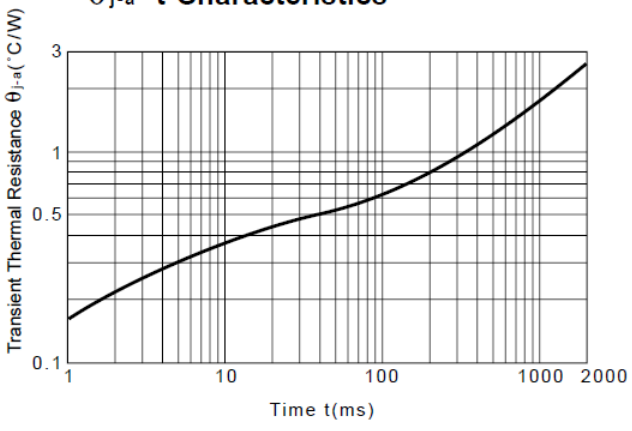
h_{FE}–I_C Characteristics (Typical)



h_{FE}–I_C Temperature Characteristics (Typical)

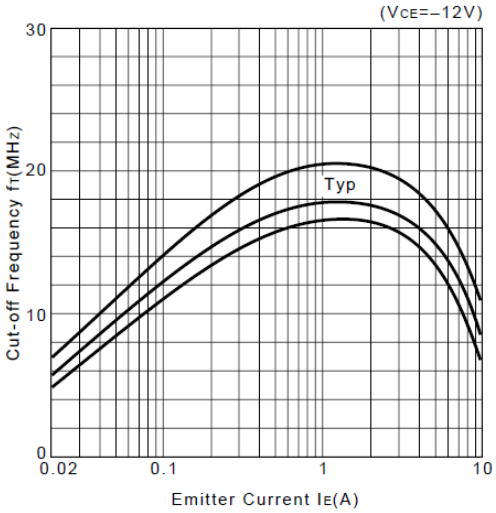


$\theta_{j\text{-}a}$–t Characteristics

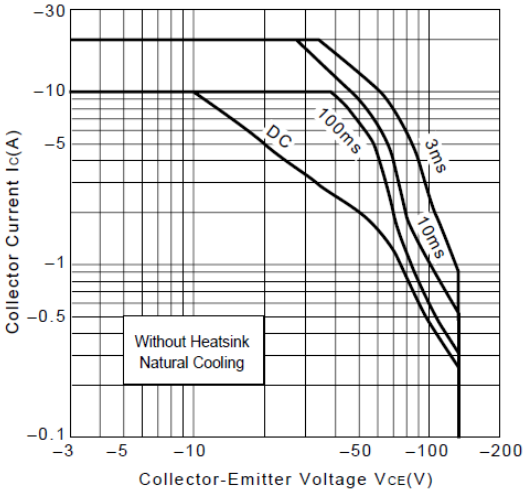


Typical Characteristics

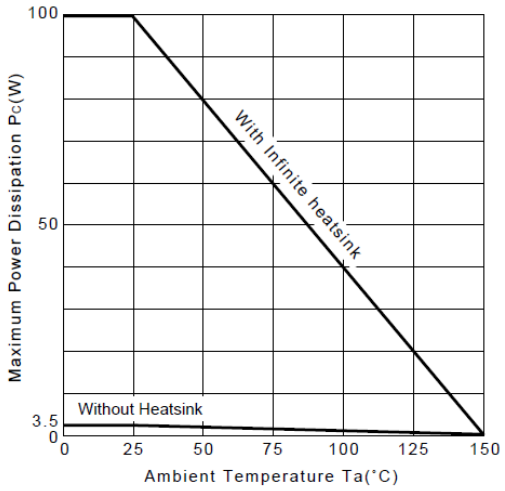
f_T–I_E Characteristics (Typical)



Safe Operating Area (Single Pulse)



Pc–Ta Derating



HA1695

Package Dimensions

SYMBOL	MILLIMETERS
A（mm）	15.60±0.20
A1（mm）	13.60±0.20
A2（mm）	9.60±0.20
B（mm）	19.90±0.20
B1（mm）	13.90±0.20
B2（mm）	12.76±0.20
B3（mm）	3.80±0.20
C（mm）	20.00±0.30
C1（mm）	3.50±0.20
C2（mm）	16.50±0.30
D（mm）	5.45（TYP）
D1（mm）	2.0±0.20
D2（mm）	3.0±0.20
D3（mm）	1.00±0.20
E（mm）	4.80±0.20
E1（mm）	1.50± $^{+0.15}_{-0.05}$
E2（mm）	1.40±0.20
F（mm）	18.70±0.20
G（mm）	0.60 $^{+0.15}_{-0.05}$
ϕ（mm）	3.20±0.10