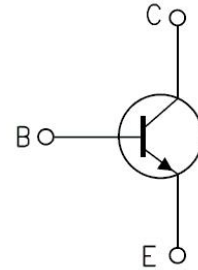
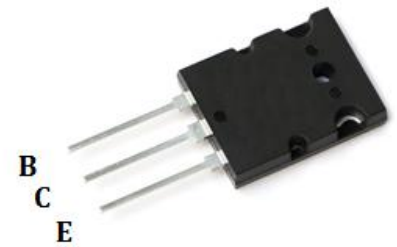


Power Amplifier Applications

- Complementary to TTA1943
- High collector voltage: $V_{CEO}=230V$ (min)
- Recommended for 100-W high-fidelity audio frequency amplifier Output stage



Note1: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.



TO-3PL

Absolute Maximum Ratings($T_c=25^{\circ}C$):

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	230	V
Collector-emitter voltage	V_{CEO}	230	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_c	15	A
Base current	I_B	1.5	A
Collector power dissipation($T_c=25^{\circ}C$)	P_c	150	W
Junction temperature	T_j	150	$^{\circ}C$
Storage temperature range	T_{STG}	-55~150	$^{\circ}C$

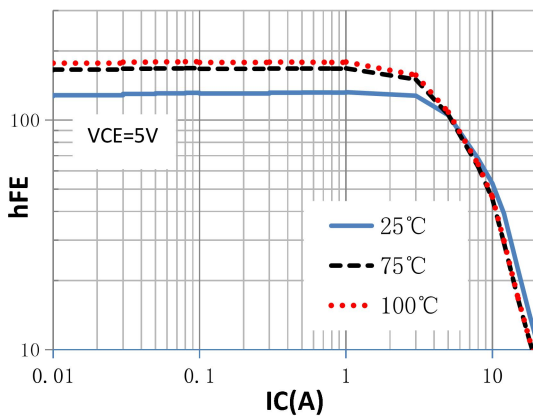
Electrical Characteristics (Tc=25°C):

Characteristics	Symbol	Test Condition	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	$V_{CB}=230V; I_E=0$			10	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V; I_C=0$			10	μA
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=50mA, I_B=0$	230			V
Dc current gain	h_{FE}	$V_{CE}=5V; I_C=1A;$	80		160	
	$h_{FE(2)}$	$V_{CE}=5V; I_C=7A;$	35			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=8A; I_B=0.8A$			3.0	V
Base-emitter voltage	V_{BE}	$V_{CE}=5V; I_C=7A$			1.5	
Transition frequency	f_T	$V_{CE}=5V; I_C=1A$		30		MHz

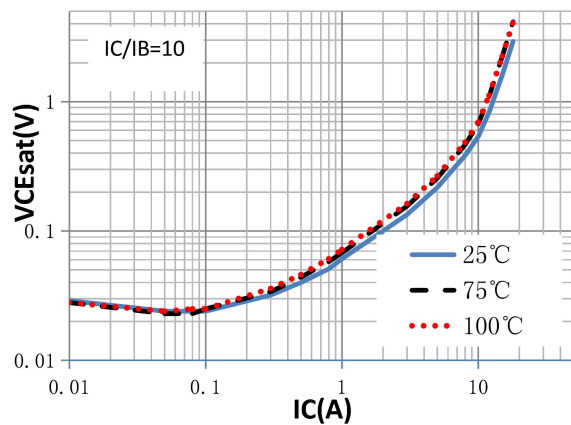
Symbol	Parameter	Typ	Units
$R_{\theta JC}$	Junction-to-Case	0.35	$^{\circ}C/W$

TYPICAL CHARACTERISTICS

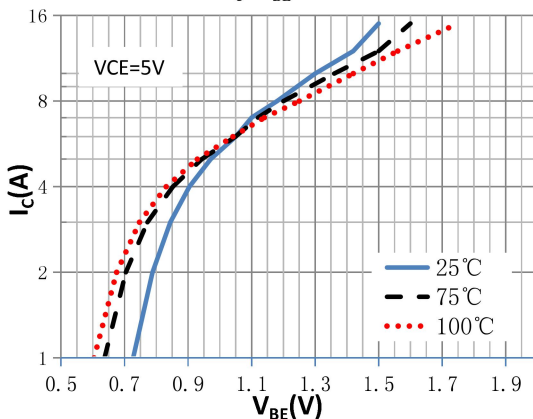
$h_{FE}-I_C$ 特性



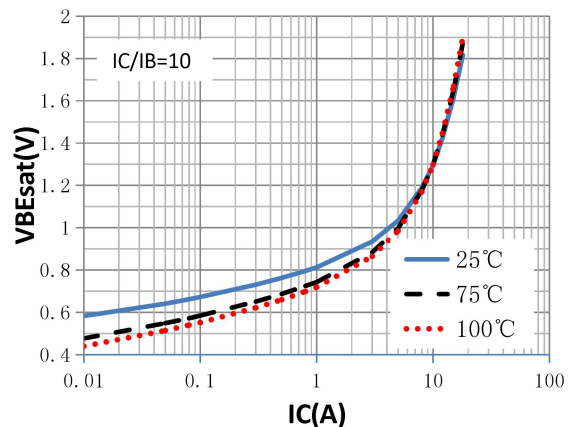
$V_{CEsat}-I_C$ 特性



I_C-V_{BE} 特性



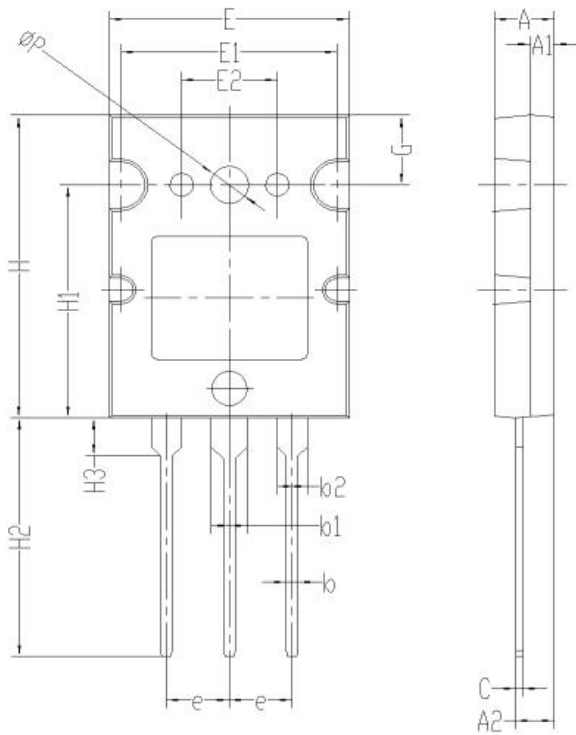
$V_{BEsat}-I_C$ 特性



Package Information

Minos Silicon NPN Triple Diffused Type

TO-3PL PACKAGE



Symbol	Dimensions (millimeters)	
	Min.	Max.
A	4.80	5.20
A1	1.80	2.20
A2	3.00	3.40
b	0.80	1.20
b1	2.80	3.20
b2	2.30	2.70
c	0.40	0.80
e	5.25	5.65
E	19.8	20.2
E1	17.8	18.2
E2	7.8	8.2
H	25.8	26.2
H1	19.8	20.2
H2	20.0	21.0
H3	3.05	3.45
G	5.80	6.20
ΦP	3.10	3.50
J	4.80	5.20
K	1.80	2.20