迈诺斯科技

MJL21194

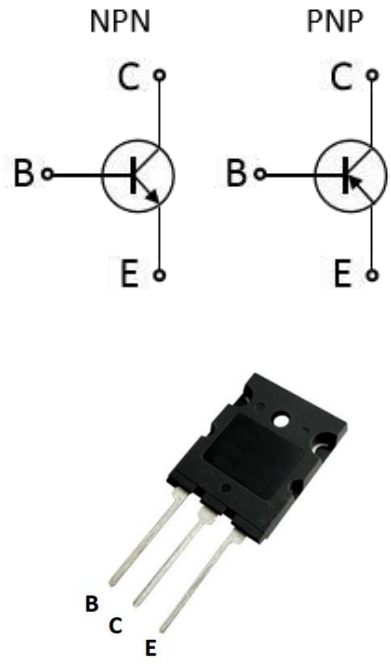
Minos Silicon NPN Epitaxial Type

MJL21194

Power Amplifier Applications

① Complementary to MJL21193
② High collector voltage:VCEO=250V(min)
③ Recommended for 100-W high-fidelity audio frequency amplifier Output stage

Note: 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.



封装形式: TO-264

Absolute Maximum Ratings(Tc=25℃):

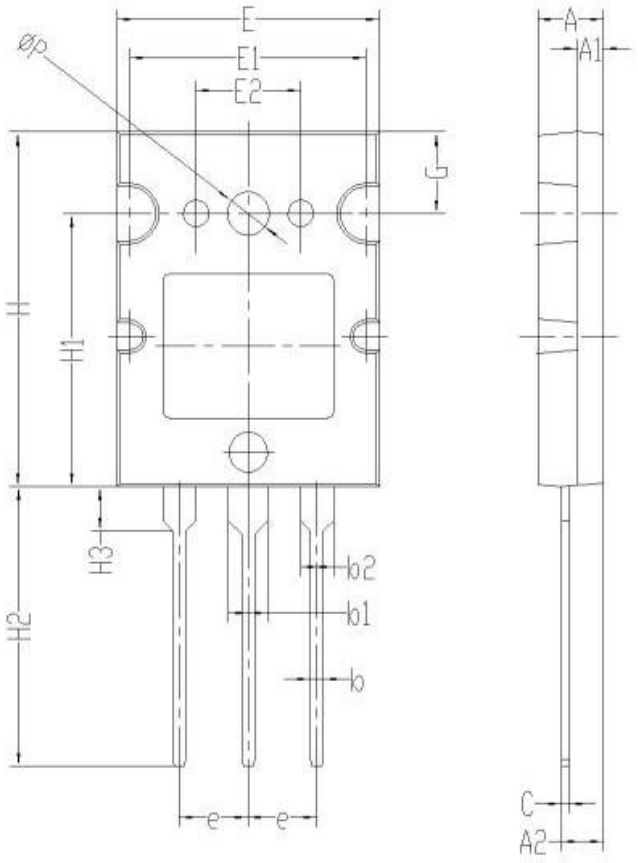
Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	400	V
Collector-emitter voltage	V_{CEO}	250	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	16	A
Bese current	I_B	5	A
Collector power dissipation(Tc=25℃)	P_C	200	W
Junction temperature	T_j	150	℃
Storage temperature range	T_{STG}	-55~150	℃

Electrical Characteristics (Tc=25℃):

Characteristics	Symbol	Test Condition	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	V_{CB}=250V; I_E=0			10	uA
Emitter cut-off current	I_{EBO}	V_{EB}=5V; I_c=0			10	uA
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=50mA,I_B=0	250			V
Dc current gain	h_{FE}	V_{CE}=5V; I_C=8A;	20		80	
	$h_{FE(2)}$	V_{CE}=5V; I_C=16A;	8			
Collector-emitter saturation voltage	V_{CE}(sat)	I_C=8A; I_B=0.8A			1.4	V
	V_{CE}(sat)	I_C=16A; I_B=3.2A			4	V
Base-emitter voltage	V_{BE}	V_{CE}=5V;I_C=8A			2.2	V
Transition frequency	f_T	V_{CE}=10V; I_C=1A	4			MHz

Symbol	Paramter	Typ	Units
$R_{\theta JC}$	Junction-to-Case	0.63	℃/W

Package Information



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

TO-264 PACKAGE

NOTE:

1. Exceeding the maximum ratings of the device in performance may cause damage to the device, even the permanent failure, which may affect the dependability of the machine. Please do not exceed the absolute maximum ratings of the device when circuit designing.
2. When installing the heat sink, please pay attention to the torsional moment and the smoothness of the heat sink.
3. MOSFETs is the device which is sensitive to the static electricity, it is necessary to protect the device from being damaged by the static electricity when using it.
4. Shenzhen Minos reserves the right to make changes in this specification sheet and is subject to change withoutprior notice.

CONTACT:

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