

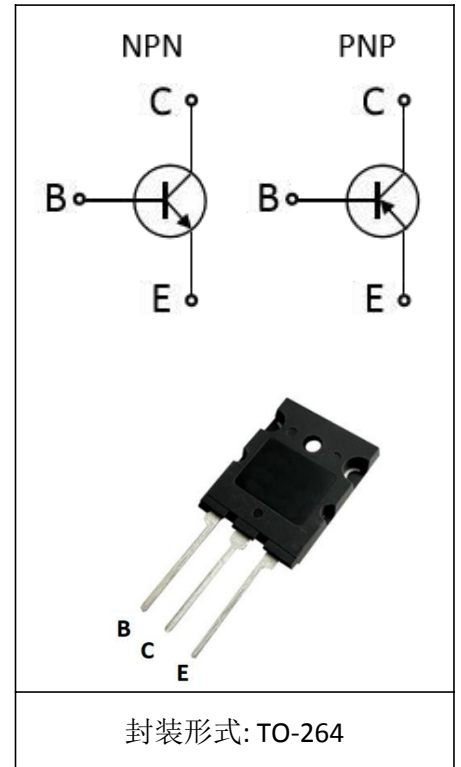
Minos Silicon PNP Epitaxial Type

MJL21193

Power Amplifier Applications

- ① Complementary to MJL21194
- ② High collector voltage: $V_{CEO} = -250V(\text{min})$
- 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.



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

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
Base current	I_B	-5	A
Collector power dissipation ($T_c=25^\circ\text{C}$)	P_C	200	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55~150	$^\circ\text{C}$

Electrical Characteristics (T_c=25 °C):

Characteristics	Symbol	Test Condition	Min	Typ	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} =-250V; I _E =0			-10.0	μA
Emitter cut-off current	I _{EBO}	V _{EB} =-5V; I _C =0			-10.0	μA
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	Parameter	Typ	Units
R _{θJC}	Junction-to-Case	0.63	°C/W

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 without prior notice.

CONTACT:

深圳市迈诺斯科技有限公司（总部）

地址：深圳市福田区华富街道田面社区深南中路4026号田面城市大厦22B-22C

邮编：518025

电话：0755-83273777