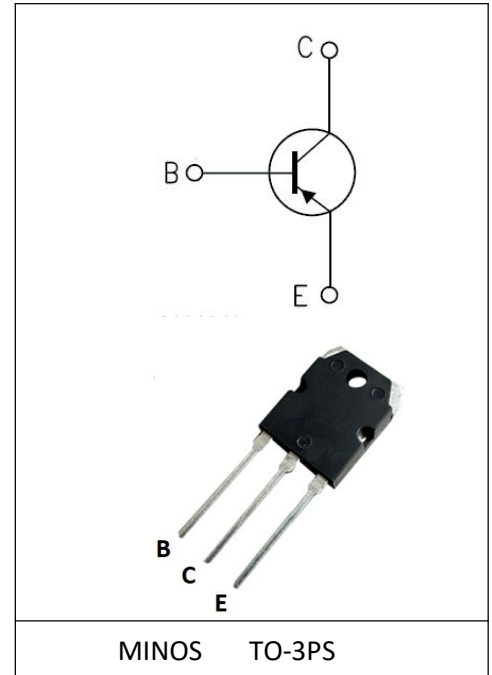


2SA1941

Power Amplifier Applications

- Complementary to 2SC5198
- High collector voltage: $V_{CEO} = -140V$ (min)
- 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($T_c=25^\circ\text{C}$):

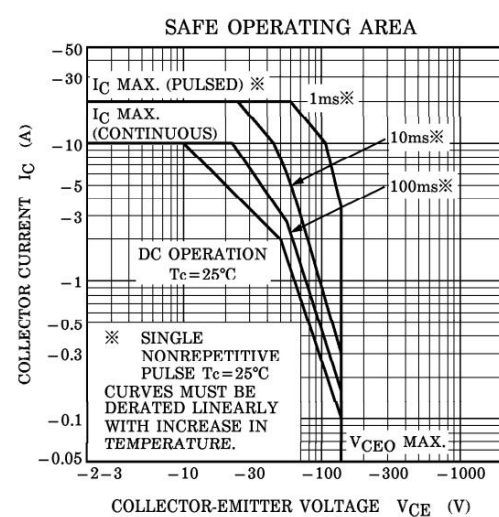
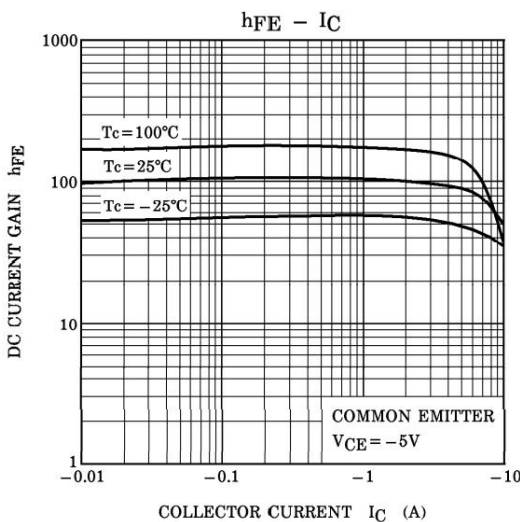
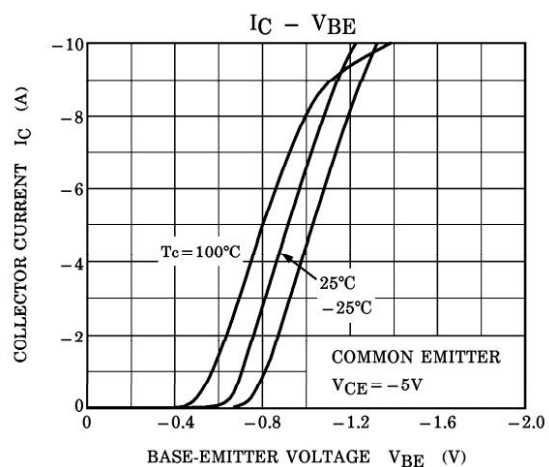
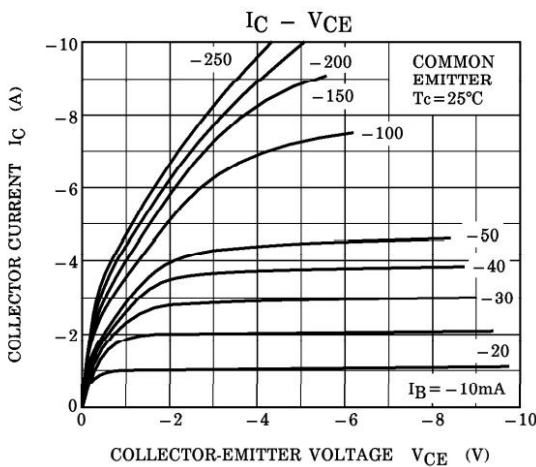
Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-140	V
Collector-emitter voltage	V_{CEO}	-140	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_c	-10	A
Base current	I_B	-1	A
Collector power dissipation ($T_c=25^\circ\text{C}$)	P_c	100	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55~150	$^\circ\text{C}$

Electrical Characteristics (Tc=25°C):

Characteristics	Symbol	Test Condition	Min	Typ	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} =-140V; I _E =0			-5.0	uA
Emitter cut-off current	I _{EBO}	V _{EB} =-5V; I _C =0			-5.0	uA
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-50mA; I _B =0	-140			V
DC current gain	h _{FE}	I _C =-1A; V _{CE} =-5V	55		160	
	h _{FE(2)}	I _C =-5A; V _{CE} =-5V	35	83		
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-8A; I _B =-0.8A		-0.8	-2.5	V
Base-emitter voltage	V _{BE}	V _{CE} =-5V; I _C =-5A		-1.0	-1.5	V
Transition frequency	f _T	V _{CE} =-5V; I _C =-1A		30		MHz

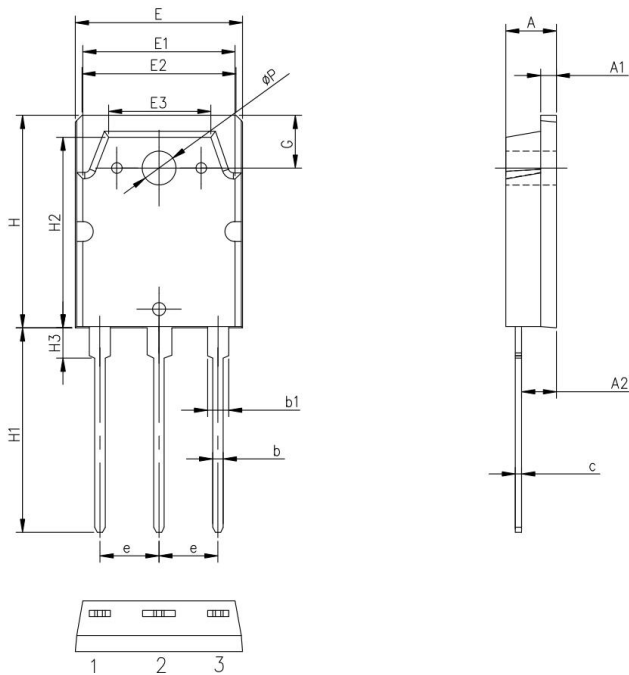
Symbol	Parameter	Typ	Units
R _{θJC}	Junction-to-Case	0.35	°C/W

TYPICAL CHARACTERISTICS



Package Information

TO-3PS PACKAGE



Symbol	单位 mm		
	Min	Nom	Max
A	4.30	4.50	4.70
A1	1.3	1.5	1.7
A2	2.50	2.70	2.90
b	0.80	1.0	1.20
b1	1.80	2.00	2.20
c	0.50	0.60	0.70
e	5.25	5.45	5.65
E	15.1	15.5	15.9
E1	13.1	13.3	13.5
E2	13.2	13.4	13.6
E3	9.1	9.3	9.5
H	19.8	20.0	20.2
H1	20.0	20.5	21.0
H2	18.3	18.5	18.7
H3	2.8	3.0	3.2
G	4.30	4.50	4.70
ΦP	3.00	3.20	3.40

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