

Inchange Semiconductor

Product Specification

Silicon NPN Power Transistors

2SC1827

DESCRIPTION

- With TO-220 package
- Complement to type 2SA769
- Collector current : $I_C=4A$
- Collector dissipation
: $P_C=30W@T_C=25$

APPLICATIONS

- For use in low frequency power amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter



Absolute maximum ratings (Ta=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	80	V
V_{CEO}	Collector-emitter voltage	Open base	80	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current (DC)		4	A
P_C	Collector power dissipation	$T_C=25$	30	W
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =25mA ; I _B =0	80			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =0.1mA ; I _E =0	80			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =0.1mA ; I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =3A ; I _B =0.3A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =3A ; I _B =0.3A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =80V ; I _E =0			10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V ; I _C =0			10	μA
h _{FE}	DC current gain	I _C =1A ; V _{CE} =4V	60		240	
f _T	Transition frequency	I _C =0.5A ; V _{CE} =2V		8		MHz

