

Silicon NPN Power Transistors

2SC2838

DESCRIPTION

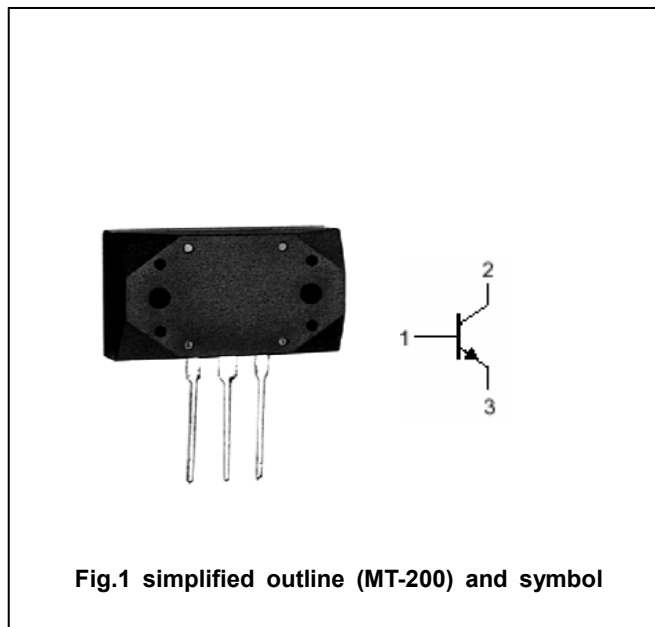
- With MT-200 package
- Fast switching speed
- Wide area of safe operation

APPLICATIONS

- For high frequency power amplifiers, audio power amplifiers, switching regulators and DC-DC converters application

PINNING(see Fig.2)

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



Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	150	V
V_{CEO}	Collector-emitter voltage	Open base	150	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		12	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	120	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

Silicon NPN Power Transistors

2SC2838

CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =10mA; I _B =0	150			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1mA; I _E =0	150			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA; I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =5 A; I _B =0.5 A			1.8	V
I _{CBO}	Collector cut-off current	V _{CB} =140V; I _E =0			50	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			50	μA
h _{FE}	DC current gain	I _C =3A; V _{CE} =4V	60			
f _T	Transition frequency	I _C =1A; V _{CE} =10V		70		MHz

Silicon NPN Power Transistors

2SC2838

PACKAGE OUTLINE

