

Silicon NPN Power Transistors

2SC2588

DESCRIPTION

- With MT-200 package
- Excellent safe operating area
- Fast switching speed

APPLICATIONS

- Suited for high frequency power amplifiers, audio power amplifiers, switching regulators and DC-DC converters applications

PINNING(see Fig.2)

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

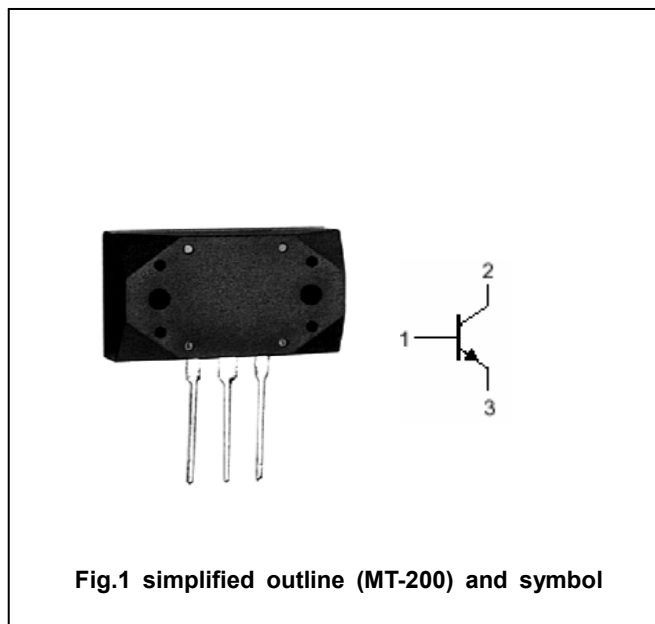


Fig.1 simplified outline (MT-200) and symbol

ABSOLUTE MAXIMUM RATINGS(T_c=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	130	V
V _{CEO}	Collector-emitter voltage	Open base	130	V
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		12	A
P _C	Collector power dissipation	T _c =25°C	120	W
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°C

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=1mA; R_{BE}=\infty$	120			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=50\mu A; I_E=0$	120			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=50\mu A; I_C=0$	5			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=5A; I_B=0.5A$			1.8	V
V_{BE}	Base-emitter voltage	$I_C=5A; V_{CE}=5V$			1.7	V
I_{CBO}	Collector cut-off current	$V_{CB}=120V; I_E=0$			50	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V; I_C=0$			50	μA
h_{FE-1}	DC current gain	$I_C=2A; V_{CE}=5V$	60		200	
h_{FE-2}	DC current gain	$I_C=7A; V_{CE}=5V$	40			
f_T	Transition frequency	$I_C=1A; V_{CB}=10V, f=1MHz$		60		MHz
C_{OB}	Output capacitance	$I_E=0; V_{CB}=10V; f=1MHz$		170		pF

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PACKAGE OUTLINE

