

Pb Free Plating Product

2SC5200



150 Watt Silicon NPN Power Transistors

DESCRIPTION

- With TO-3PL package
- Complement to type 2SA1943

APPLICATIONS

- High current switching
- Recommended for 100W high fidelity audio frequency amplifier output stage

PINNING

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

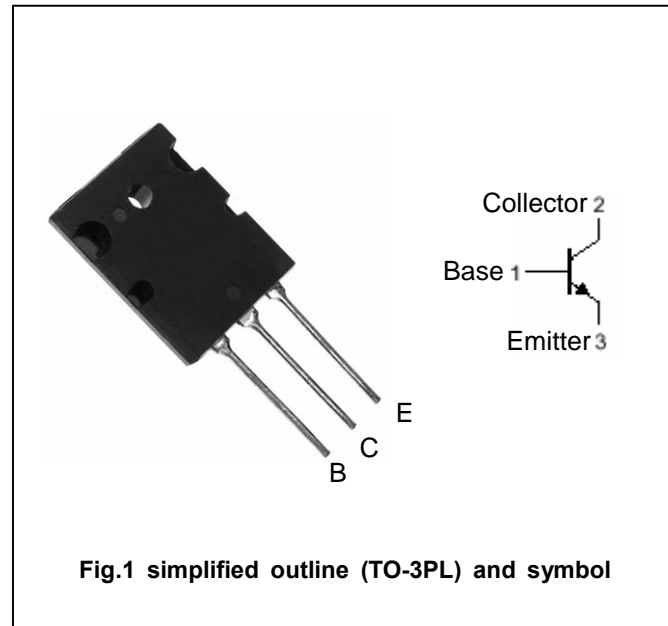


Fig.1 simplified outline (TO-3PL) and symbol

Absolute maximum ratings(Ta=25)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _{CB0}	Collector-base voltage	Open emitter	230	V
V _{CEO}	Collector-emitter voltage	Open base	230	V
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		15	A
I _B	Base current		1.5	A
P _C	Collector power dissipation	T _C =25	150	W
T _j	Junction temperature		150	
T _{stg}	Storage temperature		-55~150	

CHARACTERISTICS

Tj=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=50mA ; I_B=0$	230			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=8A ; I_B=0.8A$			3.0	V
V_{BE}	Base-emitter voltage	$I_C=7A ; V_{CE}=5V$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=230V ; I_E=0$			5	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V ; I_C=0$			5	μA
h_{FE-1}	DC current gain	$I_C=1A ; V_{CE}=5V$	55		160	
h_{FE-2}	DC current gain	$I_C=7A ; V_{CE}=5V$	35			
f_T	Transition frequency	$I_C=1A ; V_{CE}=5V$		30		MHz
C_{OB}	Collector output capacitance	$f=1MHz ; V_{CB}=10V$		200		pF

◆ h_{FE-1} classifications

R	O
55-100	80-160

Mechanical Dimensions

