Pb Free Plating Product

2SC5200

150 Watt Silicon Epitaxial Planar NPN Power Transistor

DESCRIPTION

·With TO-3PL package

·Complement to type 2SA1943

APPLICATIONS

·High current switching

·Recommended for 100W high fidelity audio frequency amplifier output stage

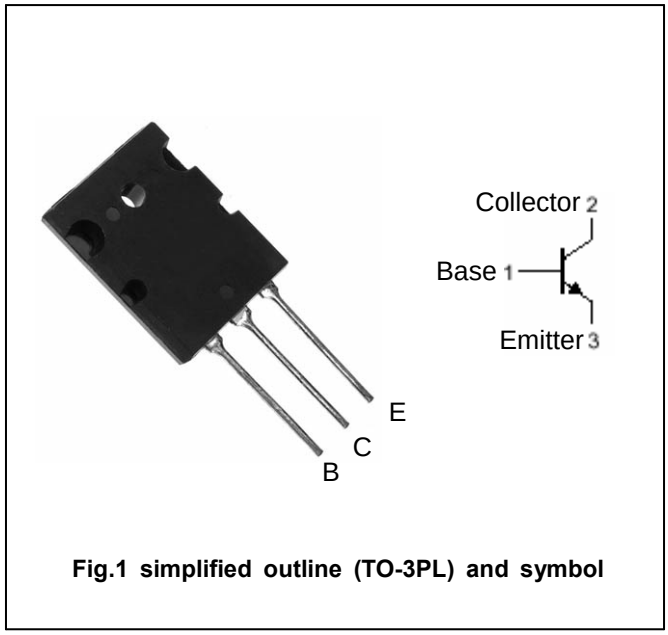


Fig.1 simplified outline (TO-3PL) and symbol

PINNING

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

Absolute maximum ratings(Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_{CBO}	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

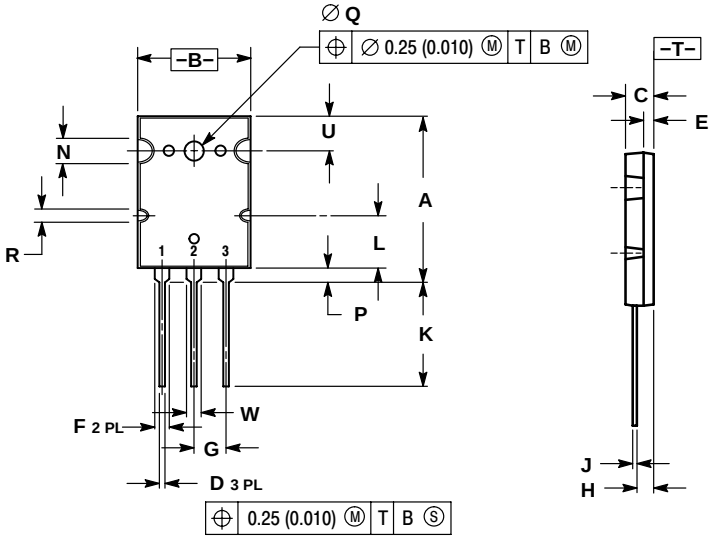
SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=50mA ;I_B=0	230			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=8A ;I_B=0.8A			3.0	V
V_{BE}	Base-emitter voltage	I_C=7A ; V_{CE}=5V			1.5	V
I_{CBO}	Collector cut-off current	V_{CB}=230V; I_E=0			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

TO-3PL



NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETER.

	MILLIMETERS		INCHES	
DIM	MIN	MAX	MIN	MAX
A	28.0	29.0	1.102	1.142
B	19.3	20.3	0.760	0.800
C	4.7	5.3	0.185	0.209
D	0.93	1.48	0.037	0.058
E	1.9	2.1	0.075	0.083
F	2.2	2.4	0.087	0.102
G	5.45 BSC		0.215 BSC	
H	2.6	3.0	0.102	0.118
J	0.43	0.78	0.017	0.031
K	17.6	18.8	0.693	0.740
L	11.2 REF		0.411 REF	
N	4.35 REF		0.172 REF	
P	2.2	2.6	0.087	0.102
Q	3.1	3.5	0.122	0.137
R	2.25 REF		0.089 REF	
U	6.3 REF		0.248 REF	
W	2.8	3.2	0.110	0.125

STYLE 2:
PIN 1. BASE
2. COLLECTOR
3. EMITTER