

Silicon NPN Power Transistors

2SC1157

DESCRIPTION

- With TO-202 package
- High transition frequency
- Complement to type 2SA647

APPLICATIONS

- For power amplifier switching applications

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

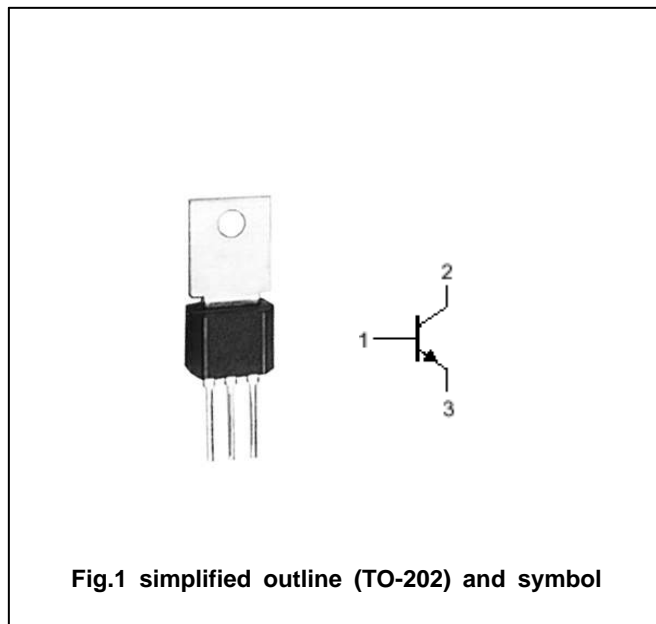


Fig.1 simplified outline (TO-202) and symbol

Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	110	V
V_{CEO}	Collector-emitter voltage	Open base	100	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		0.8	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	7	W
T_j	Junction temperature		-40~150	$^\circ\text{C}$
T_{stg}	Storage temperature		-40~150	$^\circ\text{C}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEsat}	Collector-emitter saturation voltage	I _C =300mA I _B =30m A			1.2	V
V _{BEsat}	Base-emitter saturation voltage	I _C =300mA I _B =30m A			1.5	V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =100 μ A; I _E =0	110			V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =1mA; I _B =0	100			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =100 μ A; I _C =0	5			V
I _{CBO}	Collector cut-off current	V _{CB} =110V; I _E =0			1.0	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			1.0	μ A
h _{FE}	DC current gain	I _C =300mA ; V _{CE} =4V	20		300	
f _T	Transition frequency	I _E =100mA ; V _{CB} =10V		70		MHz

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PACKAGE OUTLINE

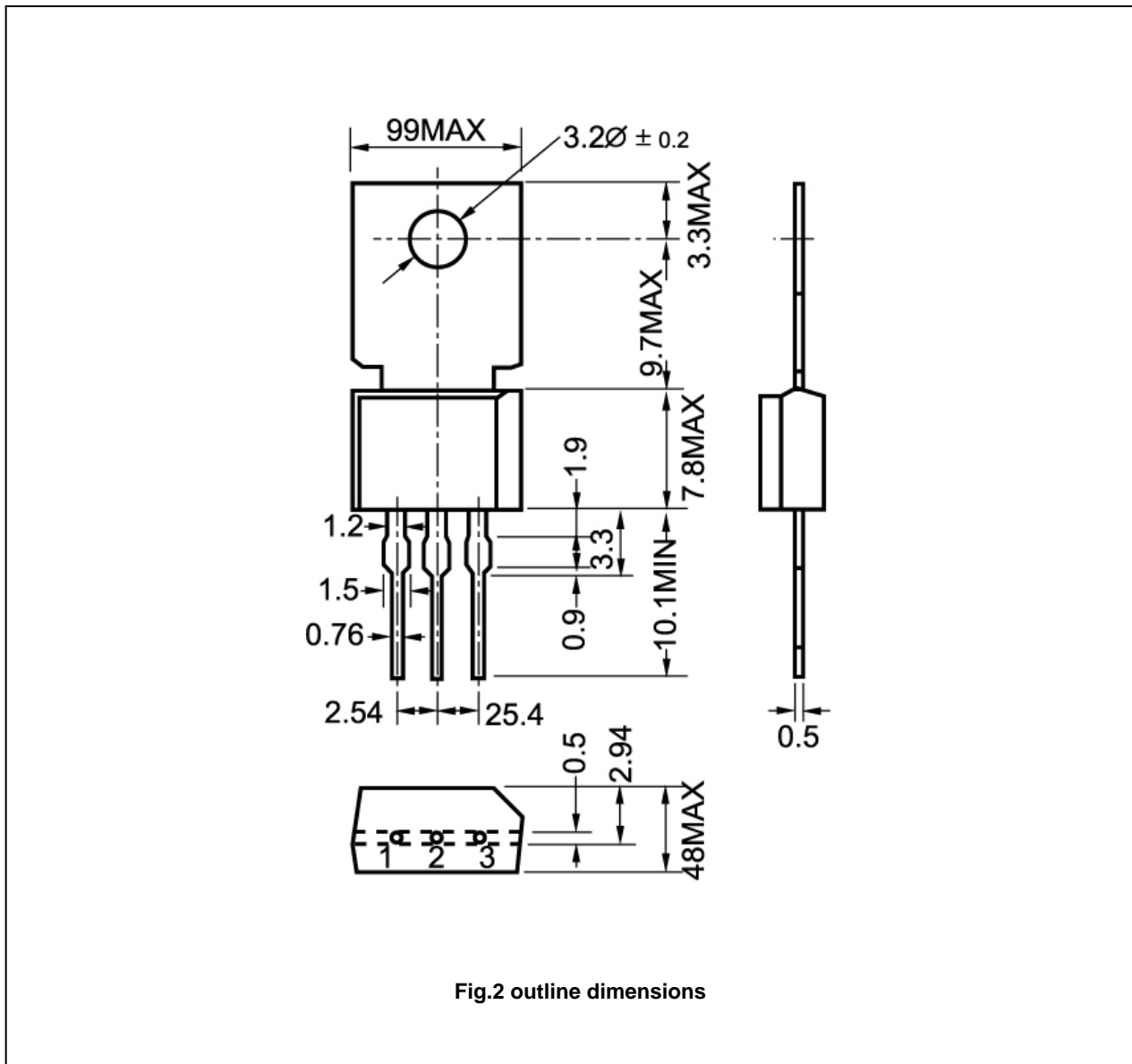


Fig.2 outline dimensions