

Silicon NPN Power Transistors

2SC1002

DESCRIPTION

- With TO-66 package
- High voltage
- High transition frequency

APPLICATIONS

- For color TV video output applications

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

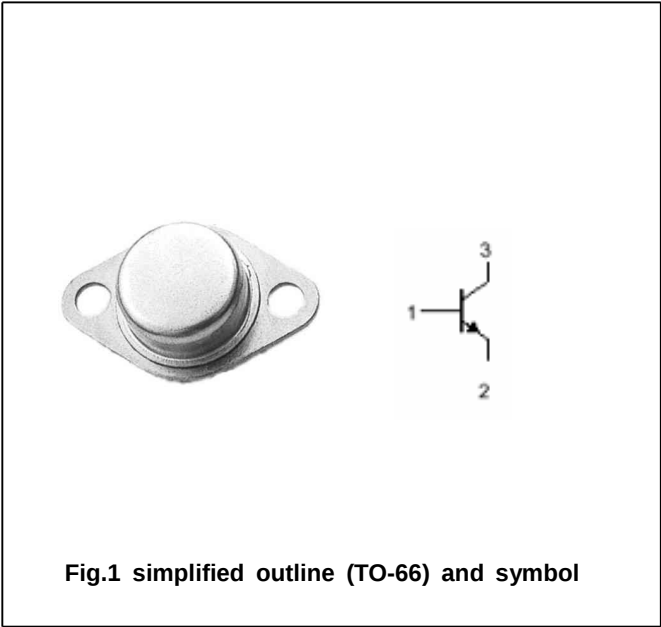


Fig.1 simplified outline (TO-66) and symbol

Absolute maximum ratings(Ta=25?)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	300	V
V _{CEO}	Collector-emitter voltage	Open base	300	V
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		50	mA
P _T	Total power dissipation	T _C =25?	11	W
T _j	Junction temperature		150	?
T _{stg}	Storage temperature		-55~150	?

Silicon NPN Power Transistors

2SC1002

CHARACTERISTICS

Tj=25? unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=0.1mA$; $I_B=0$	300			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1\mu A$; $I_C=0$	5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=20mA$; $I_B=2mA$			1.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=20mA$; $I_B=2mA$			1.5	V
I_{CEO}	Collector cut-off current	$V_{CE}=200V$; $I_B=0$			1	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V$; $I_C=0$			1	μA
h_{FE}	DC current gain	$I_C=10mA$; $V_{CE}=10V$	40		200	
f_T	Transition frequency	$I_C=10mA$; $V_{CE}=20V$	60			MHz

Silicon NPN Power Transistors

2SC1002

PACKAGE OUTLINE

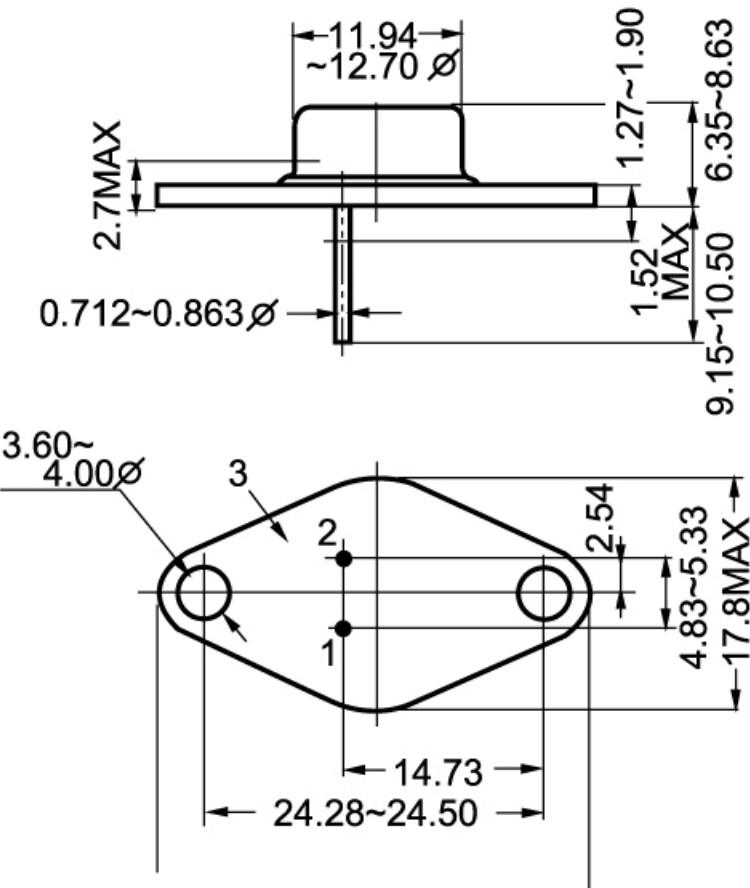


Fig.2 Outline dimensions