

Silicon NPN Power Transistors

2N3585

DESCRIPTION

- With TO-66 package
- Continuous collector current- $I_C=2A$
- Power dissipation - $PD=35W$ @ $T_C=25^{\circ}C$
- $V_{CE(SAT)}=0.75V(Max)$ @ $I_C=1A$; $I_B=0.125A$

APPLICATIONS

- High speed switching and linear amplification
- High-voltage operational amplifiers
- Switching regulators ,converters
- Deflection stages and high fidelity amplifiers

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

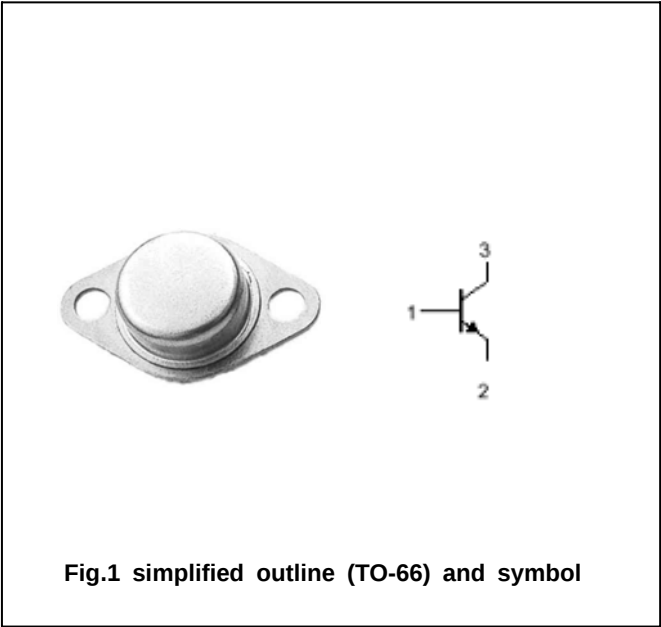


Fig.1 simplified outline (TO-66) and symbol

Absolute maximum ratings($T_a=25^{\circ}C$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	500	V
V_{CEO}	Collector-emitter voltage	Open base	300	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		2	A
I_{CM}	Collector current-Peak		5	A
I_B	Base current		1	A
P_T	Total power dissipation	$T_C=25^{\circ}C$	35	W
T_j	Junction temperature		200	$^{\circ}C$
T_{stg}	Storage temperature		-65~200	$^{\circ}C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-C}$	Thermal resistance junction to case	5.0	$^{\circ}C/W$

Silicon NPN Power Transistors

2N3585

CHARACTERISTICS

 $T_j=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=0.2\text{A}$; $I_B=0$	300			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=1\text{A}$; $I_B=0.125\text{A}$			0.75	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=1\text{A}$; $I_B=0.1\text{A}$			1.4	V
V_{BE}	Base -emitter on voltage	$I_C=1\text{A}$; $V_{CE}=10\text{V}$			1.4	V
I_{CEX}	Collector cut-off current	$V_{CE}=450\text{V}$; $V_{BE(off)}=1.5\text{V}$ $V_{CE}=300\text{V}$; $V_{BE(off)}=1.5\text{V}$ $T_C=150^{\circ}\text{C}$			1.0 3.0	mA
I_{CEO}	Collector cut-off current	$V_{CE}=150\text{V}$; $I_B=0$			5.0	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=6\text{V}$; $I_C=0$			0.5	mA
h_{FE-1}	DC current gain	$I_C=0.1\text{A}$; $V_{CE}=10\text{V}$	40			
h_{FE-2}	DC current gain	$I_C=1\text{A}$; $V_{CE}=2\text{V}$	8		80	
h_{FE-3}	DC current gain	$I_C=1\text{A}$; $V_{CE}=10\text{V}$	25		100	

Silicon NPN Power Transistors

2N3585

PACKAGE OUTLINE

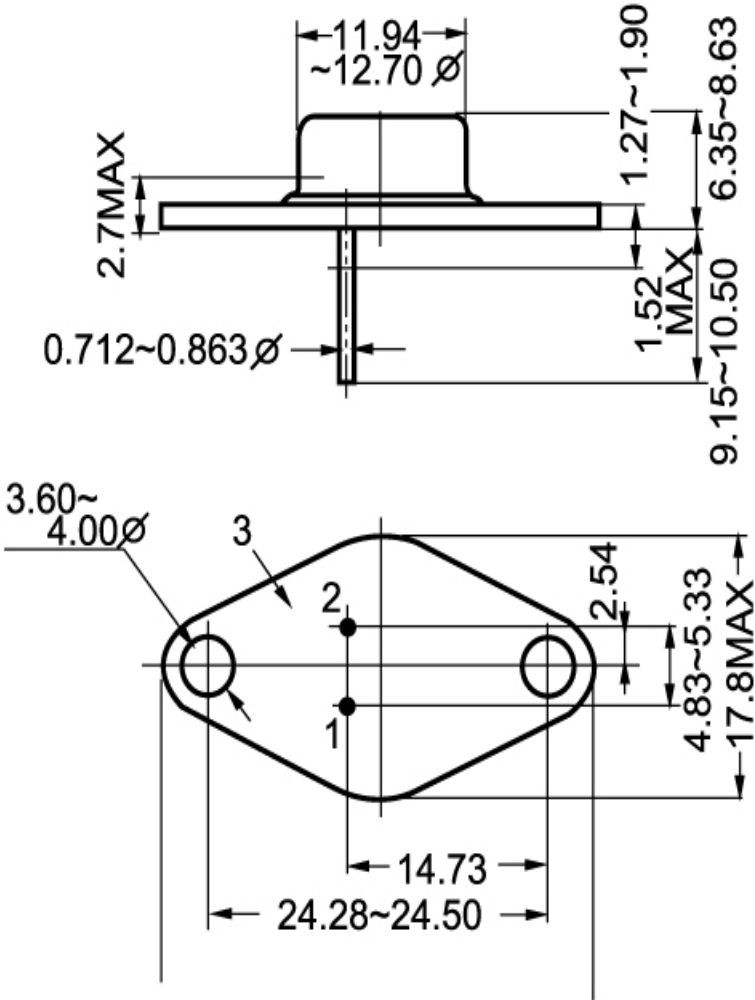


Fig.2 Outline dimensions

Silicon NPN Power Transistors

2N3585

