

Silicon NPN Power Transistors

2SC1579

DESCRIPTION

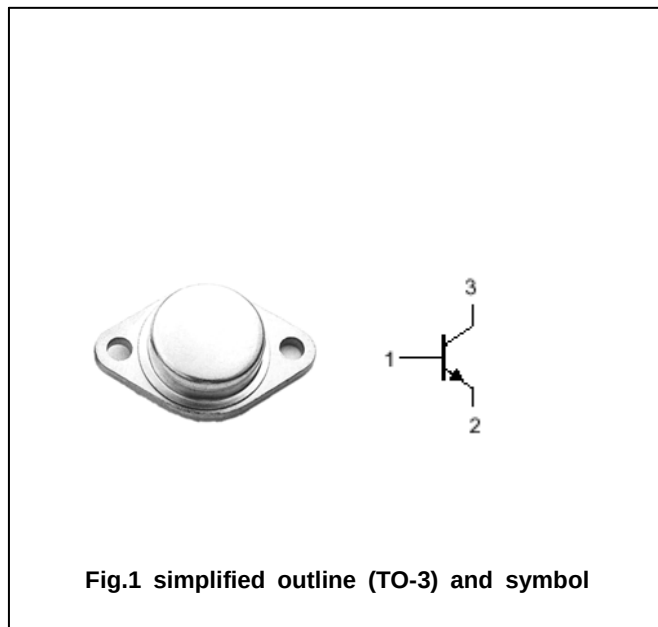
- With TO-3 package
- High voltage ,high speed

APPLICATIONS

- Converters
- Inverters
- Switching regulators
- Motor controls

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_{CBO}	Collector-base voltage	Open emitter	500	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		15	A
I_{CM}	Collector current-Peak		30	A
P_T	Total power dissipation	$T_C = 25^\circ\text{C}$	150	W
T_j	Junction temperature		200	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-mb}$	Thermal resistance from junction to mounting base	1.0	$^\circ\text{C/W}$

Silicon NPN Power Transistors**2SC1579****CHARACTERISTICS** $T_j=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=10\text{mA}$; $I_B=0$	400			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1\text{mA}$; $I_C=0$	7			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=10\text{A}$; $I_B=2\text{A}$			1.5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=10\text{A}$; $I_B=2\text{A}$			2.0	V
I_{CBO}	Collector cut-off current	$V_{CB}=500\text{V}$; $I_E=0$			0.1	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=7\text{V}$; $I_C=0$			0.1	mA
h_{FE}	DC current gain	$I_C=5\text{A}$; $V_{CE}=4\text{V}$	10		25	
f_T	Transition frequency	$I_C=0.5\text{A}$; $V_{CE}=10\text{V}$		5		MHz

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PACKAGE OUTLINE

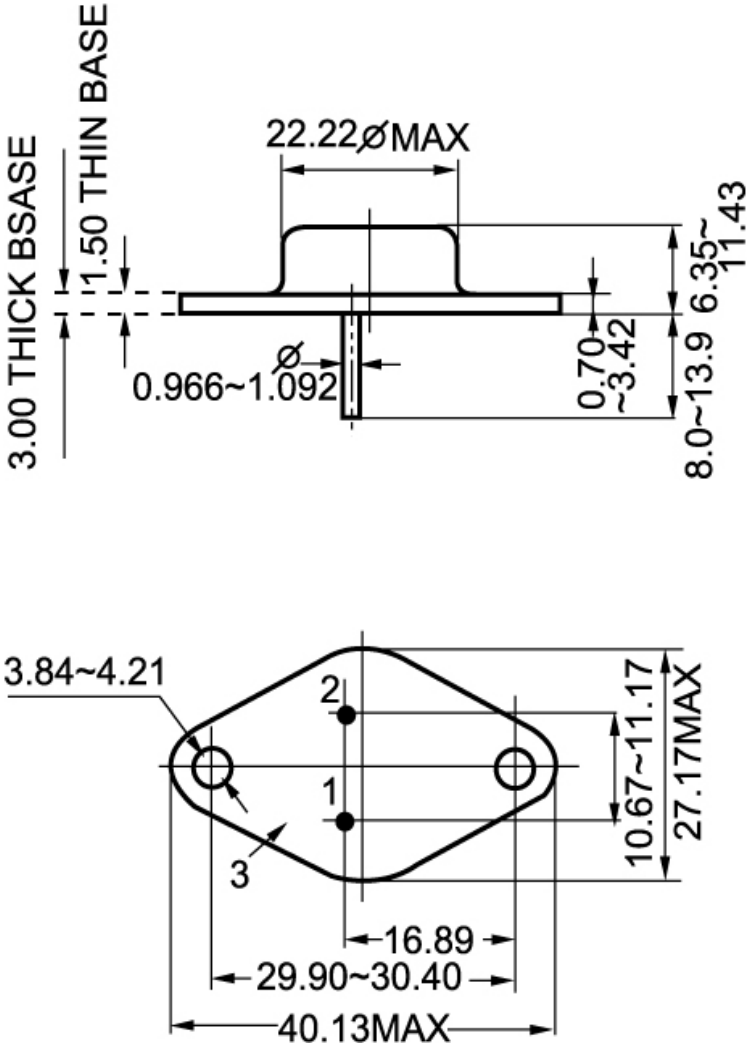


Fig.2 Outline dimensions