

Silicon NPN Power Transistors

2SC1358

**DESCRIPTION**

- With TO-3 package
- High breakdown voltage
- High speed switching

**APPLICATIONS**

- Designed for use in large screen color deflection circuits

**PINNING (See Fig.2)**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

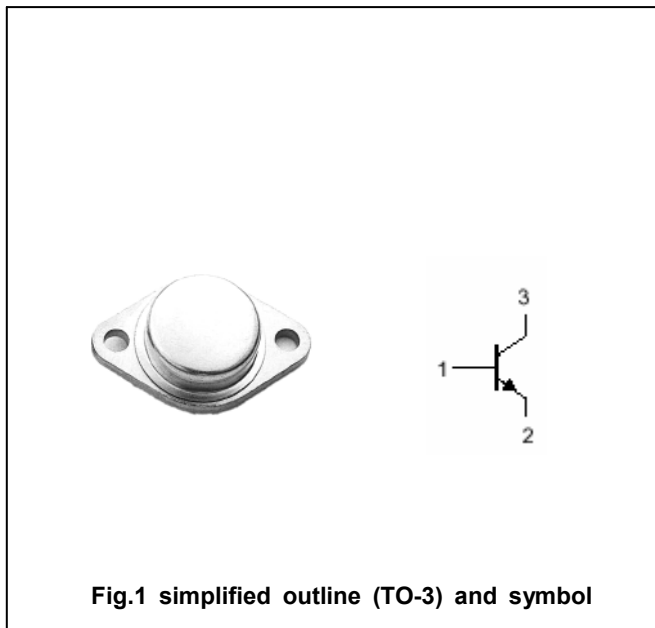


Fig.1 simplified outline (TO-3) and symbol

**Absolute maximum ratings(Ta=25°C)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	1400	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	500	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	6	V
I <sub>C</sub>	Collector current		4.5	A
I <sub>CM</sub>	Collector current-peak		10	A
I <sub>B</sub>	Base current		1.5	A
P <sub>T</sub>	Total power dissipation	T <sub>C</sub> =25°C	50	W
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-65~150	°C

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	VALUE	UNIT
R <sub>th j-c</sub>	Thermal resistance from junction to case	2.5	°C/W

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## CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =0.1A ; I <sub>B</sub> =0	500			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =4A; I <sub>B</sub> =0.8A			10	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =4A; I <sub>B</sub> =0.8A			1.2	V
I <sub>CES</sub>	Collector cut-off current	V <sub>CE</sub> =1400V; V <sub>BE</sub> =0			1.0	mA
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =1000V; I <sub>E</sub> =0			20	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			200	μA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =0.5A ; V <sub>CE</sub> =15V	10		45	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =3A ; V <sub>CE</sub> =15V	5		35	
t <sub>stg</sub>	Storage time	I <sub>C</sub> =4A; I <sub>B1</sub> =-I <sub>B2</sub> =1.0A P <sub>W</sub> =20μs			10	μs
t <sub>f</sub>	Fall time				1.0	μs

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PACKAGE OUTLINE

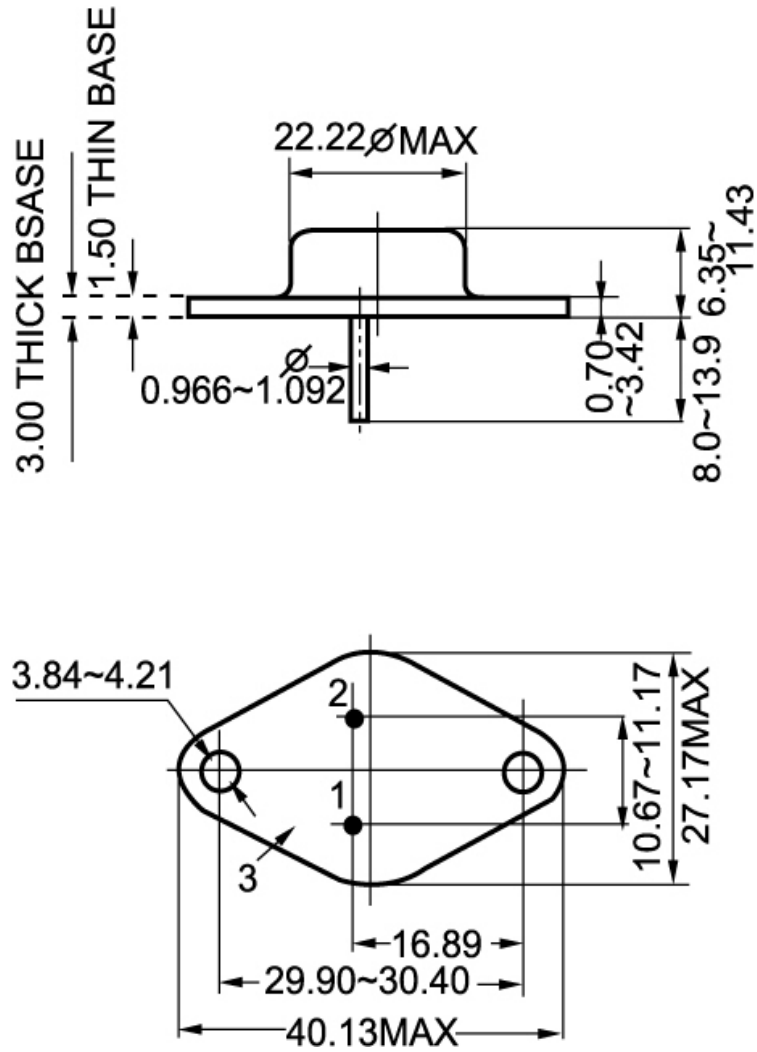


Fig.2 Outline dimensions