

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

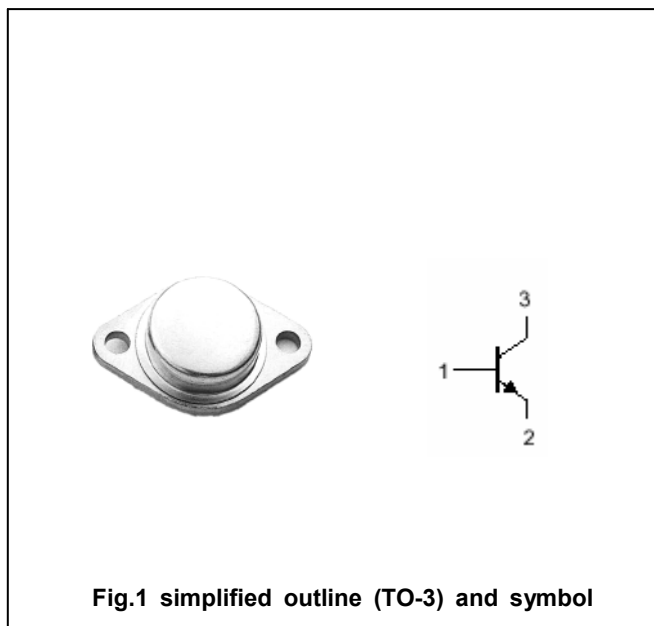


Fig.1 simplified outline (TO-3) and symbol

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1400	V
V_{CEO}	Collector-emitter voltage	Open base	500	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		4.5	A
I_{CM}	Collector current-peak		10	A
I_B	Base current		1.5	A
P_T	Total power dissipation	$T_C=25^\circ\text{C}$	50	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-C}$	Thermal resistance from junction to case	2.5	$^\circ\text{C/W}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =0.1A ; I _B =0	500			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =4A; I _B =0.8A			10	V
V _{BEsat}	Base-emitter saturation voltage	I _C =4A; I _B =0.8A			1.2	V
I _{CES}	Collector cut-off current	V _{CE} =1400V; V _{BE} =0			1.0	mA
I _{CBO}	Collector cut-off current	V _{CB} =1000V; I _E =0			20	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			200	μA
h _{FE-1}	DC current gain	I _C =0.5A ; V _{CE} =15V	10		45	
h _{FE-2}	DC current gain	I _C =3A ; V _{CE} =15V	5		35	
t _{stg}	Storage time	I _C =4A; I _{B1} =-I _{B2} =1.0A P _W =20μs			10	μs
t _f	Fall time				1.0	μs

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PACKAGE OUTLINE

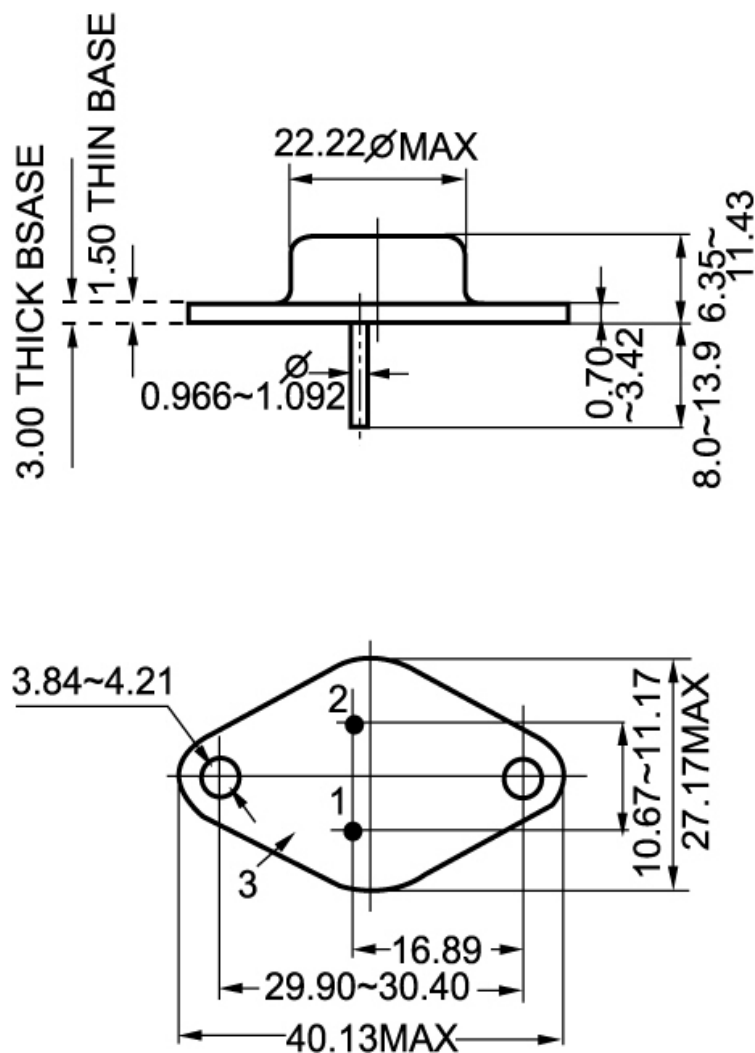


Fig.2 Outline dimensions