

Silicon NPN Power Transistors

2N6359

DESCRIPTION

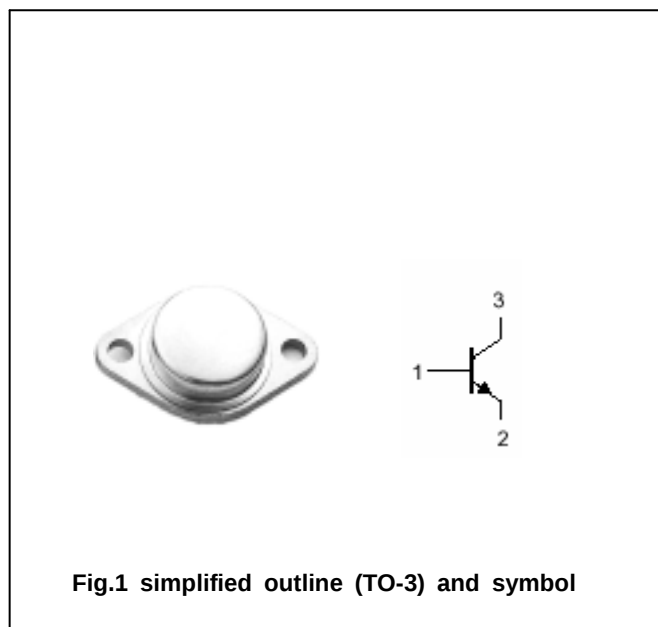
- With TO-3 package
- Low collector saturation voltage
- High DC current gain
- Excellent safe operating area

APPLICATIONS

- Designed for high power applications and switching circuits such as relay or solenoid drivers, dc to dc converters or inverters.

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings($T_a =$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	100	V
V_{CEO}	Collector-emitter voltage	Open base	80	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		16	A
I_{CM}	Collector current-peak		30	A
I_B	Base current		4	A
P_D	Total Power Dissipation	$T_C = 25$	150	W
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-65~200	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	1.17	/W

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CHARACTERISTICS

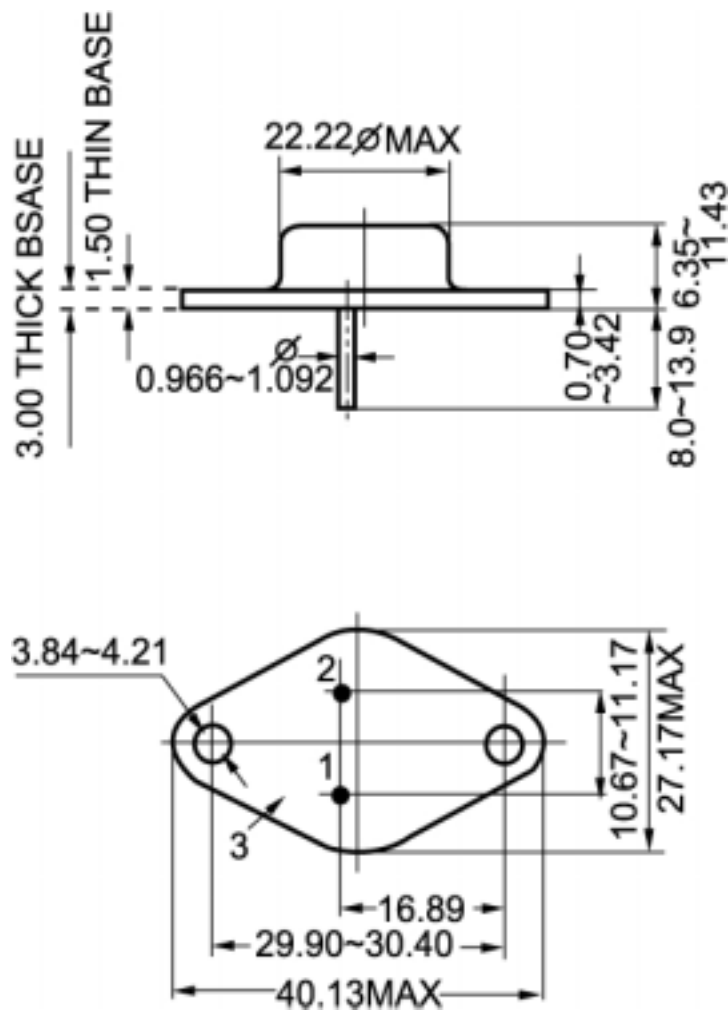
T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdwn voltage	I _C =0.2A ; I _B =0	80			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =8A ; I _B =0.8A			1.4	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =16A ; I _B =3.2A			4.0	V
V _{BE}	Base-emitter on voltage	I _C =8A ; V _{CE} =4V			2.2	V
I _{CEO}	Collector cut-off current	V _{CE} =80V ; I _B =0			2.0	mA
I _{CEX}	Collector cut-off current	V _{CE} =100V ; V _{BE(off)} =1.5V T _C =150			2.0 10.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =7V ; I _C =0			5.0	mA
h _{FE-1}	DC current gain	I _C =8A ; V _{CE} =4V	15		60	
h _{FE-2}	DC current gain	I _C =16A ; V _{CE} =4V	5			
f _T	Transition frequency	I _C =1A ; V _{CE} =4V	0.2			MHz

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PACKAGE OUTLINE

Fig.2 outline dimensions (unindicated tolerance: $\pm 0.10\text{mm}$)