

## Silicon NPN Power Transistors

2N6358

## DESCRIPTION

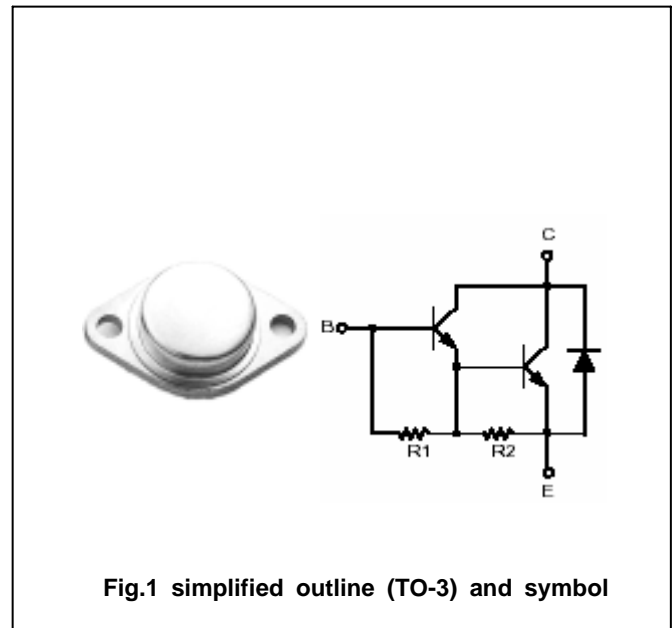
- With TO-3 package
- High DC current gain
- DARLINGTON

## APPLICATIONS

- For general-purpose amplifier and low-frequency switching applications

## 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	80	V
$V_{CEO}$	Collector-emitter voltage	Open base	60	V
$V_{EBO}$	Emitter-base voltage	Open collector	5	V
$I_C$	Collector current		20	A
$I_B$	Base current		0.5	A
$P_D$	Total Power Dissipation	$T_C=25$	150	W
$T_j$	Junction temperature		200	
$T_{stg}$	Storage temperature		-65~200	

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	1.09	/W

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =0.2A ; I <sub>B</sub> =0	60			V
V <sub>CEsat-1</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =10A ; I <sub>B</sub> =40mA			2.0	V
V <sub>CEsat-2</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =20A ; I <sub>B</sub> =1A			4.0	V
V <sub>BE sat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =20A ; I <sub>B</sub> =1A			4.0	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =10A ; V <sub>CE</sub> =4V			2.8	V
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =60V; I <sub>B</sub> =0			1.0	mA
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =80V; I <sub>E</sub> =0			0.5	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			5.0	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =4A ; V <sub>CE</sub> =5V	1500		10000	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =20A ; V <sub>CE</sub> =5V	100			

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PACKAGE OUTLINE

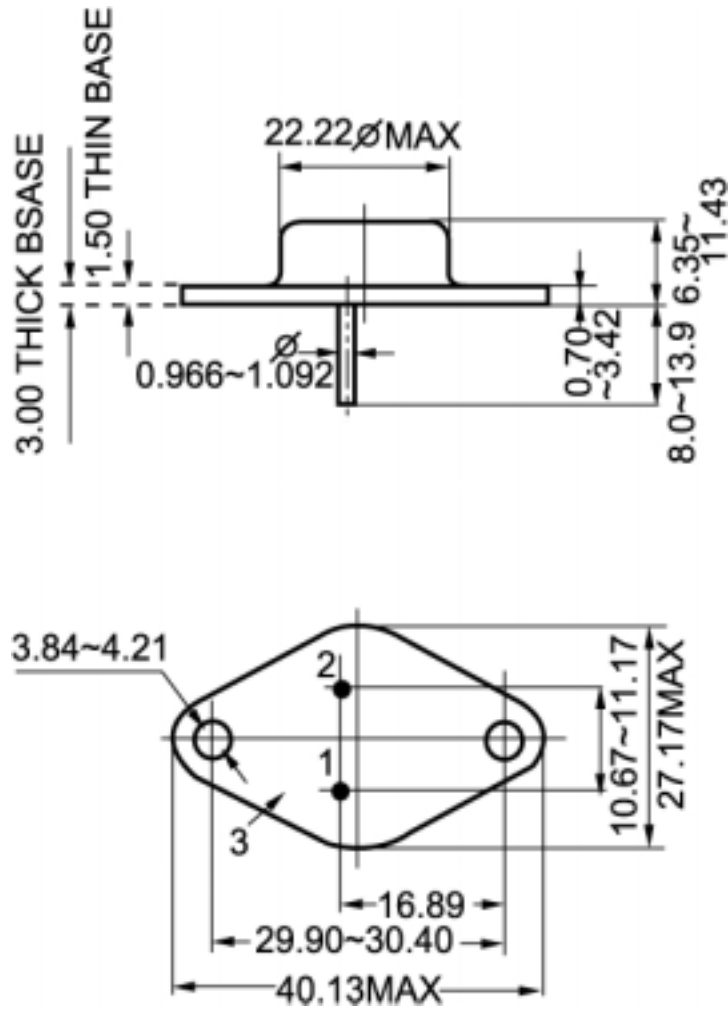


Fig.2 outline dimensions (unindicated tolerance:  $\pm 0.10\text{mm}$ )