

## Silicon NPN Power Transistors

## MJ4033/4034/4035

## DESCRIPTION

- With TO-3 package
- Respectively complement to type MJ4030/4031/4032
- DARLINGTON
- High DC current gain

## APPLICATIONS

- For use as output devices in complementary general purpose amplifier applications

## PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

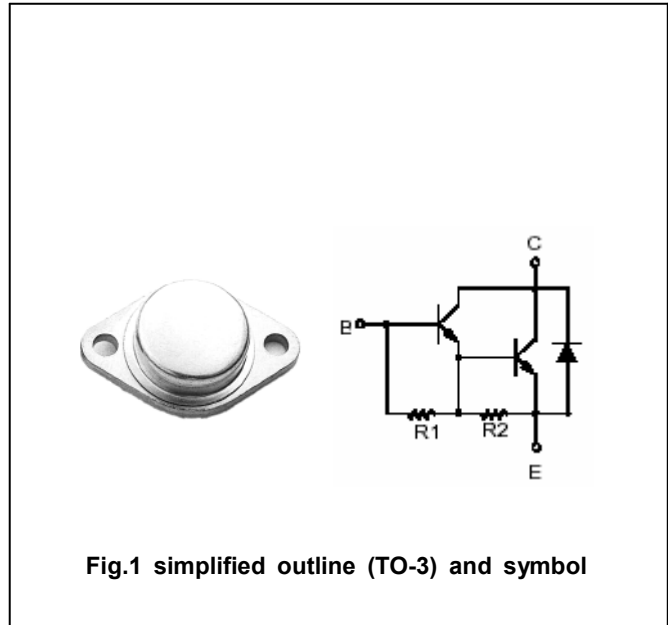


Fig.1 simplified outline (TO-3) and symbol

ABSOLUTE MAXIMUM RATINGS( $T_c=25^\circ$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	MJ4033	60	V
		MJ4034	80	
		MJ4035	100	
$V_{CEO}$	Collector-emitter voltage	MJ4033	60	V
		MJ4034	80	
		MJ4035	100	
$V_{EBO}$	Emitter-base voltage	Open collector	5	V
$I_C$	Collector current		16	A
$I_{CM}$	Collector current-peak		20	A
$I_B$	Base current		0.5	A
$P_C$	Collector power dissipation	$T_c=25^\circ$	150	W
$T_j$	Junction temperature		200	$^\circ$
$T_{stg}$	Storage temperature		-65~200	$^\circ$

## Silicon NPN Power Transistors

## MJ4033/4034/4035

## CHARACTERISTICS

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

www.datasheet4u.com

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE(SUS)</sub>	Collector-emitter sustaining voltage	MJ4033	60			V
		MJ4034	80			
		MJ4035	100			
V <sub>CE(sat)-1</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =10A; I <sub>B</sub> =40mA			2.5	V
V <sub>CE(sat)-2</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =16A; I <sub>B</sub> =80mA			4.0	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =10A; V <sub>CE</sub> =3V			3.0	V
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =30V; I <sub>B</sub> =0			3.0	mA
		V <sub>CE</sub> =40V; I <sub>B</sub> =0				
		V <sub>CE</sub> =50V; I <sub>B</sub> =0				
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			5.0	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =10A; V <sub>CE</sub> =3V	1000			

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal resistance junction to case	1.17	°C/W

PACKAGE OUTLINE

www.datasheet4u.com

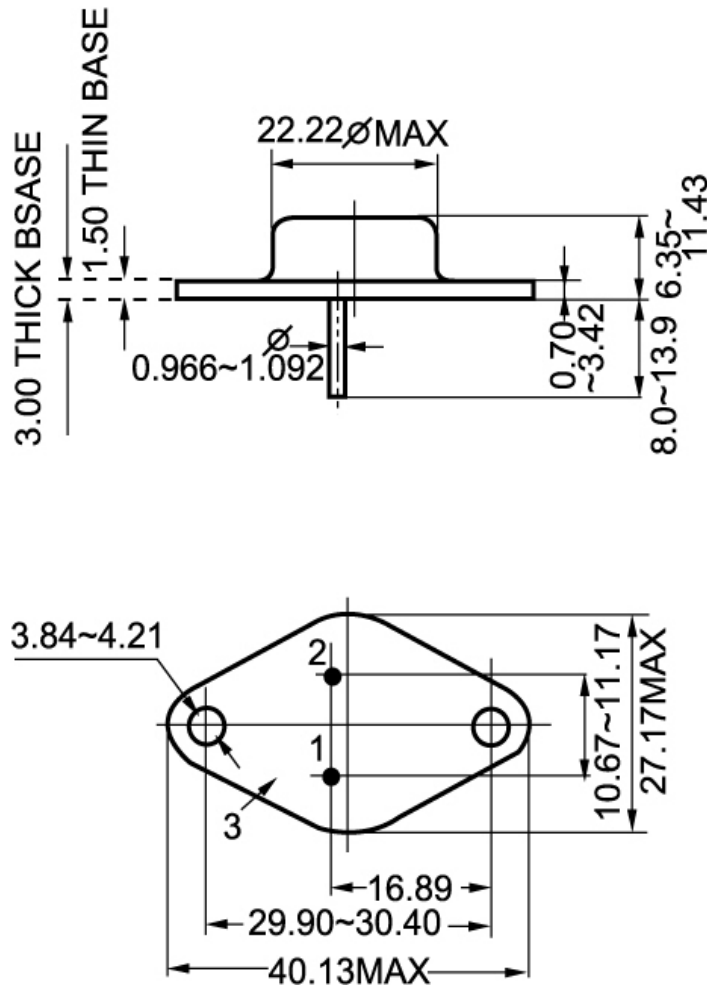


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)