

**Silicon NPN Power Transistors**

**MJ4033/4034/4035**

**DESCRIPTION**

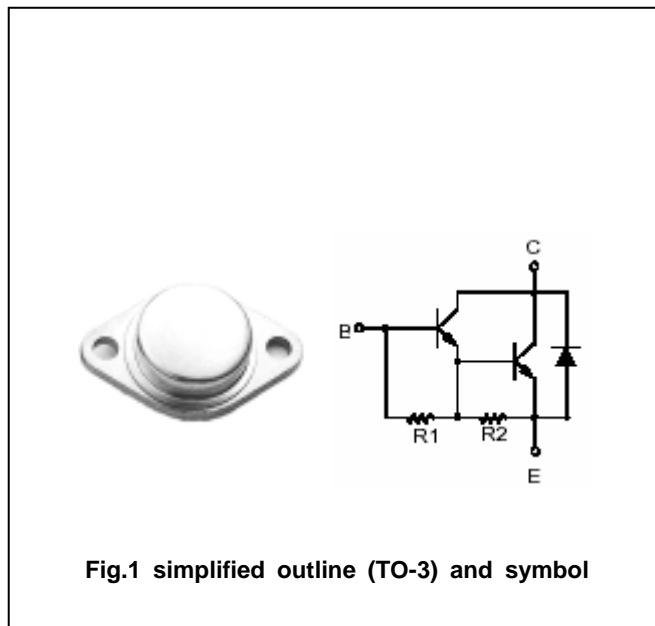
- With TO-3 package
- Respectively complement to type MJ4030/4031/4032
- DARLINGTON
- High DC current gain

**APPLICATIONS**

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

**PINNING(see Fig.2)**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



**Absolute maximum ratings(Ta= )**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	MJ4033	60	V
		MJ4034	80	
		MJ4035	100	
V <sub>CEO</sub>	Collector-emitter voltage	MJ4033	60	V
		MJ4034	80	
		MJ4035	100	
V <sub>EBO</sub>	Emitter-base voltage	Open collector	5	V
I <sub>C</sub>	Collector current		16	A
I <sub>CM</sub>	Collector current-peak		20	A
I <sub>B</sub>	Base current		0.5	A
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25	150	W
T <sub>j</sub>	Junction temperature		200	
T <sub>stg</sub>	Storage temperature		-65~200	

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## MJ4033/4034/4035

## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	MJ4033	60			V
		MJ4034	80			
		MJ4035	100			
V <sub>CEsat-1</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =10A; I <sub>B</sub> =40mA			2.5	V
V <sub>CEsat-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	/W

PACKAGE OUTLINE

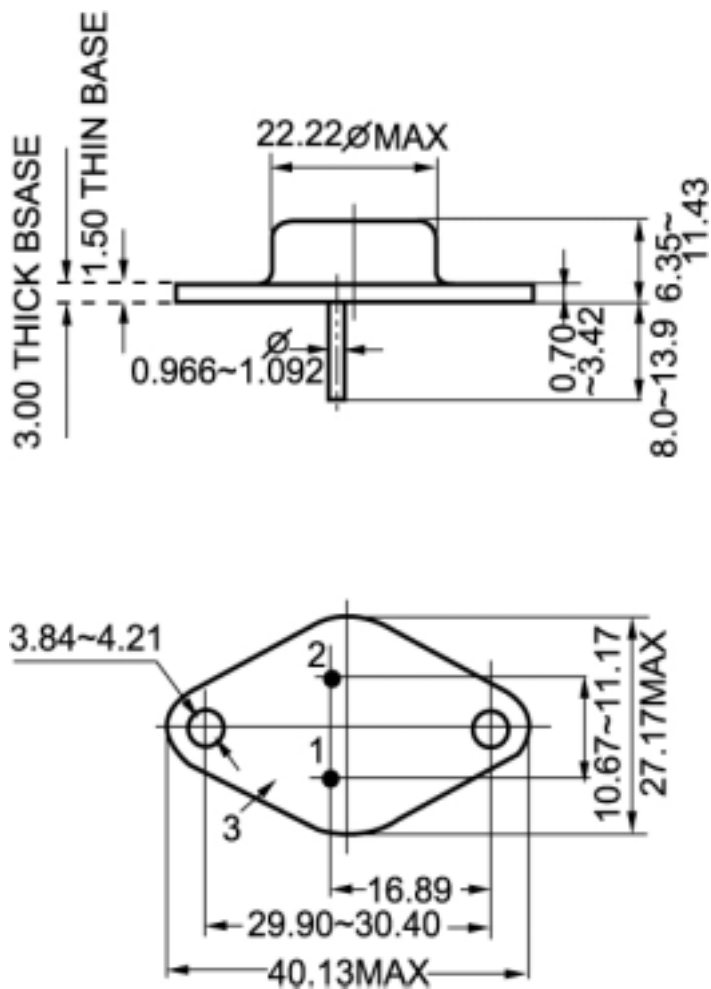


Fig.2 outline dimensions (unindicated tolerance:  $\pm 0.1\text{mm}$ )