

Silicon NPN Power Transistors

MJE800/801/802/803

DESCRIPTION

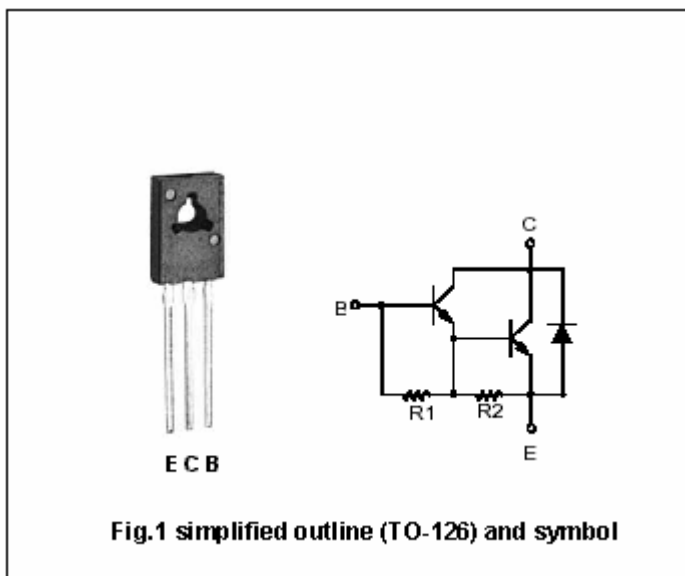
- With TO-126 package
- Complement to type MJE700/701/702/703
- High DC current gain
- DARLINGTON

APPLICATIONS

- Designed for general-purpose amplifier and low-speed switching applications

PINNING (see Fig.2)

PIN	DESCRIPTION
1	Emitter
2	Collector;connected to mounting base
3	Base



Absolute Maximun Ratings (Ta=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	MJE800/801	60	V
		MJE802/803	80	
V _{CEO}	Collector-emitter voltage	MJE800/801	60	V
		MJE802/803	80	
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		4	A
I _B	Base current		0.1	A
P _C	Collector power dissipation	T _C =25	40	W
T _j	Junction temperature		150	
T _{stg}	Storage temperature		-55~150	

Silicon NPN Power Transistors

MJE800/801/802/803

CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	MJE800/801	I _C =50mA; I _B =0	60			V
		MJE802/803		80			
V _{CEsat-1}	Collector-emitter saturation voltage	MJE800/802	I _C =1.5A; I _B =30mA			2.5	V
		MJE801/803	I _C =2A; I _B =40mA			2.8	
V _{CEsat-2}	Collector-emitter saturation voltage		I _C =4A; I _B =40mA			3.0	V
V _{BE-1}	Base-emitter on voltage	MJE800/802	I _C =1.5A; V _{CE} =3V			2.5	V
		MJE801/803	I _C =2A; V _{CE} =3V				
V _{BE-2}	Base-emitter on voltage		I _C =4A; V _{CE} =3V			3.0	V
I _{CEO}	Collector cut-off current	MJE800/801	V _{CE} =60V; I _B =0			100	μA
		MJE802/803	V _{CE} =80V; I _B =0				
I _{CBO}	Collector cut-off current		V _{CB} =Rated BV _{CEO} ; I _E =0 T _C =100			100 500	μA
I _{EBO}	Emitter cut-off current		V _{EB} =5V; I _C =0			2	mA
h _{FE-1}	DC current gain	MJE800/802	I _C =1.5A; V _{CE} =3V	750			
		MJE801/803	I _C =2A; V _{CE} =3V				
h _{FE-2}	DC current gain		I _C =4A; V _{CE} =3V	100			

Silicon NPN Power Transistors

MJE800/801/802/803

PACKAGE OUTLINE

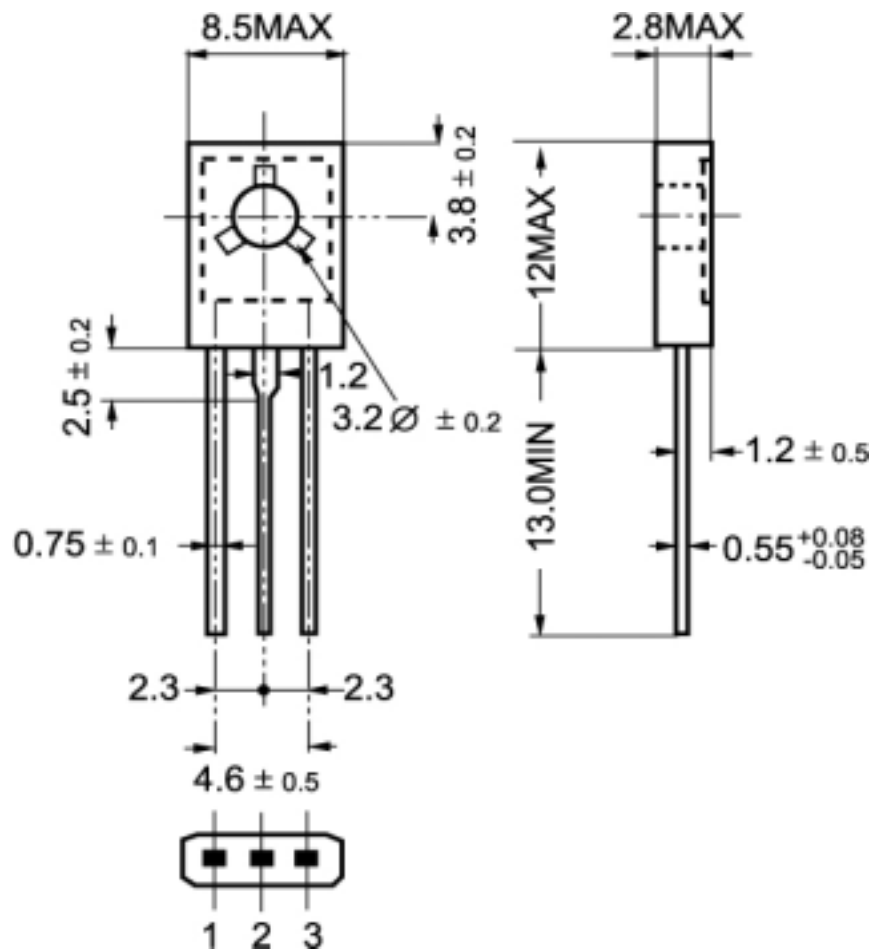


Fig.2 Outline dimensions