

Silicon NPN Power Transistors

2SD794 2SD794A

DESCRIPTION

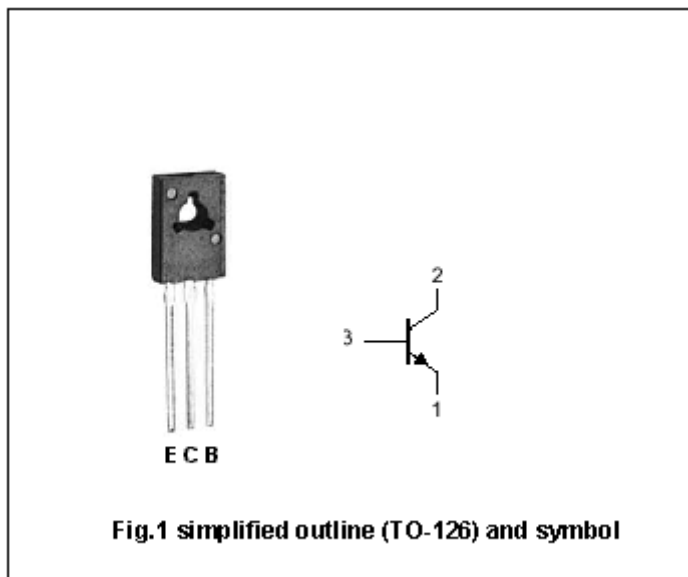
- With TO-126 package
- Complement to type 2SB744/744A
- High current 3A
- Excellent h_{FE} linearity

APPLICATIONS

- For use in audio frequency amplifier and general purpose applications

PINNING

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

Absolute maximum ratings($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage		Open emitter	70	V
V_{CEO}	Collector-emitter voltage	2SD794	Open base	45	V
		2SD794A		60	
V_{EBO}	Emitter-base voltage		Open collector	5	V
I_C	Collector current (DC)			3	A
I_{CM}	Collector current-Peak			5	A
I_B	Base current (DC)			0.6	A
P_C	Collector power dissipation		$T_a=25^{\circ}\text{C}$	1	W
			$T_c=25^{\circ}\text{C}$	10	
T_j	Junction temperature			150	$^{\circ}\text{C}$
T_{stg}	Storage temperature			-55~150	$^{\circ}\text{C}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	2SD794	I _C =10mA; I _B =0	45			V
		2SD794A		60			
V _{CEsat}	Collector-emitter saturation voltage		I _C =1.5A ; I _B =0.15A		0.3	2.0	V
V _{BEsat}	Base-emitter saturation voltage		I _C =1.5A ; I _B =0.15A		0.8	2.0	V
I _{CBO}	Collector cut-off current		V _{CB} =45V; I _E =0			1	μ A
I _{EBO}	Emitter cut-off current		V _{EB} =3V; I _C =0			1	μ A
h _{FE-1}	DC current gain		I _C =20mA ; V _{CE} =5V	30	70		
h _{FE-2}	DC current gain		I _C =0.5A ; V _{CE} =5V	60	100	320	
f _T	Transition frequency		I _C =0.1A ; V _{CE} =5V		60		MHz
C _{OB}	Collector output capacitance		f=1MHz ; V _{CB} =10V; I _E =0		40		pF

◆ h_{FE-2} Classifications

R	O	Y
60-120	100-200	160-320

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PACKAGE OUTLINE

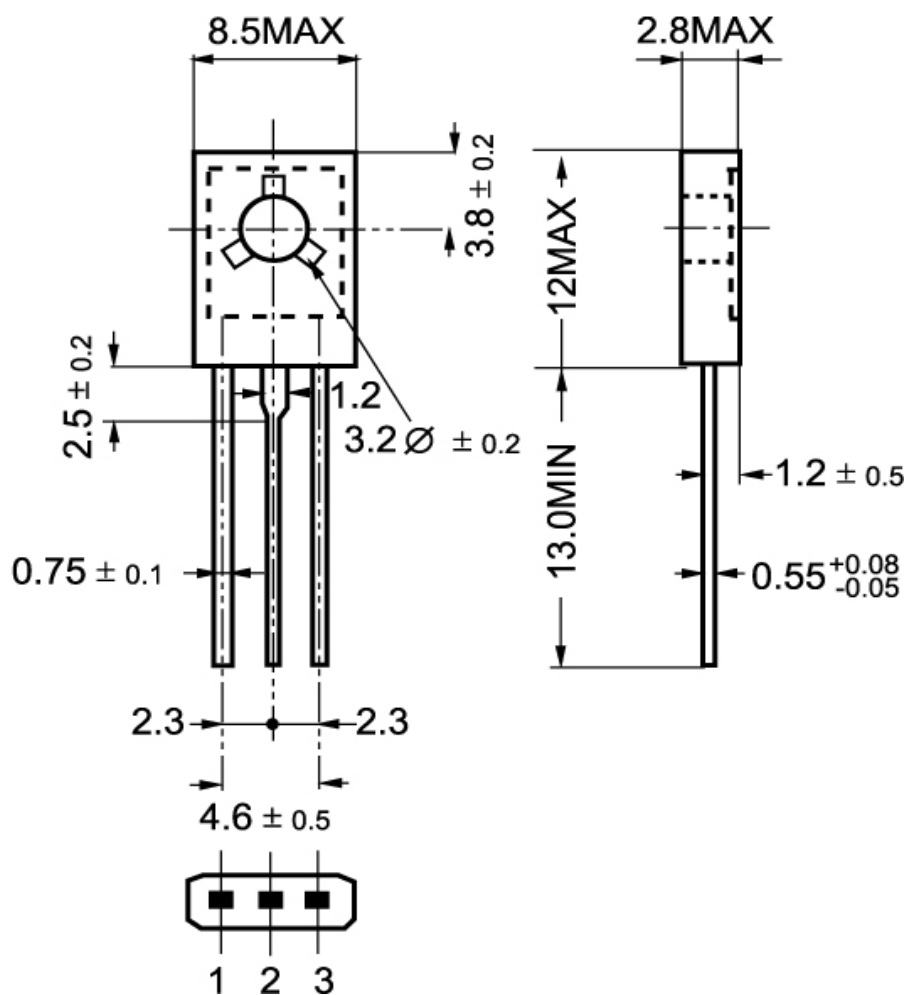


Fig.2 Outline dimensions