

TO-126C Plastic-Encapsulate Transistors

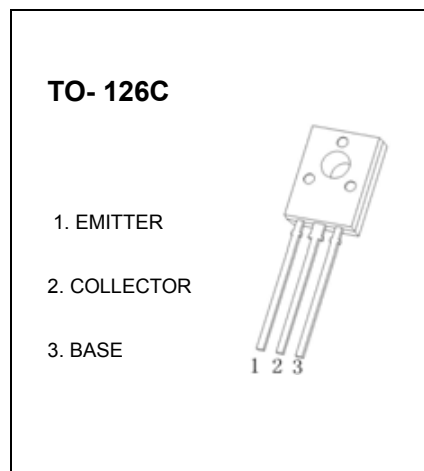
2SD794/794A TRANSISTOR (NPN)

FEATURES

- High Voltage and Large Current Capacity
- Complementary to 2SB744,2SB744A

MAXIMUM RATINGS (T_a=25 °C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	70	V
V _{CEO}	Collector-Emitter Voltage 2SD794	45	V
	2SD794A	60	
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current -Continuous	3	A
P _C	Collector Power Dissipation	1	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55 to +150	°C



ELECTRICAL CHARACTERISTICS (T_a=25 °C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =100μA, I _E =0	70			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	45			V
		2SD794 2SD794A	60			
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100μA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =45V, I _E =0			1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =3V, I _C =0			1	μA
DC current gain	h _{FE(1)}	V _{CE} =5V, I _C =20mA	30			
	h _{FE(2)}	V _{CE} =5V, I _C =0.5A	60		320	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =1.5A, I _B =0.15A			2	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =1.5A, I _B =0.15A			2	V
Transition frequency	f _T	V _{CE} =5V, I _C =100mA		60		MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		40		pF

CLASSIFICATION OF h_{FE(2)}

Rank	R	Q	P
Range	60-120	100-200	160-320