



POWER SKY (H.K.) LTD.

TO-126C Plastic-Encapsulate Transistors

2SD794/794A TRANSISTOR (NPN)

FEATURES

- High voltage and Large current capacity
- Complementary to 2SB744, 2SB744A

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

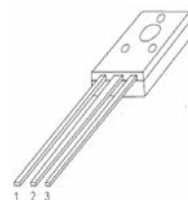
Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	70	V
V_{CEO}	Collector-Emitter Voltage 2SD794	45	V
	2SD794A	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	3	A
P_C	Collector Power Dissipation	1	W
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55 to +150	$^{\circ}\text{C}$

TO- 126C

1. EMITTER

2. COLLECTOR

3. BASE



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	70			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	45			V
		2SD794 2SD794A	60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=45\text{V}, I_E=0$			1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=3\text{V}, I_C=0$			1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=5\text{V}, I_C=20\text{mA}$	30			
	$h_{FE(2)}$	$V_{CE}=5\text{V}, I_C=0.5\text{A}$	60		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=1.5\text{A}, I_B=0.15\text{A}$			2	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=1.5\text{A}, I_B=0.15\text{A}$			2	V
Transition frequency	f_T	$V_{CE}=5\text{V}, I_C=100\text{mA}$		60		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		40		pF

CLASSIFICATION OF $h_{FE(2)}$

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

Typical Characteristics

2SD794/794A

