

isc Silicon PNP Darlington Power Transistor

2SB794

DESCRIPTION

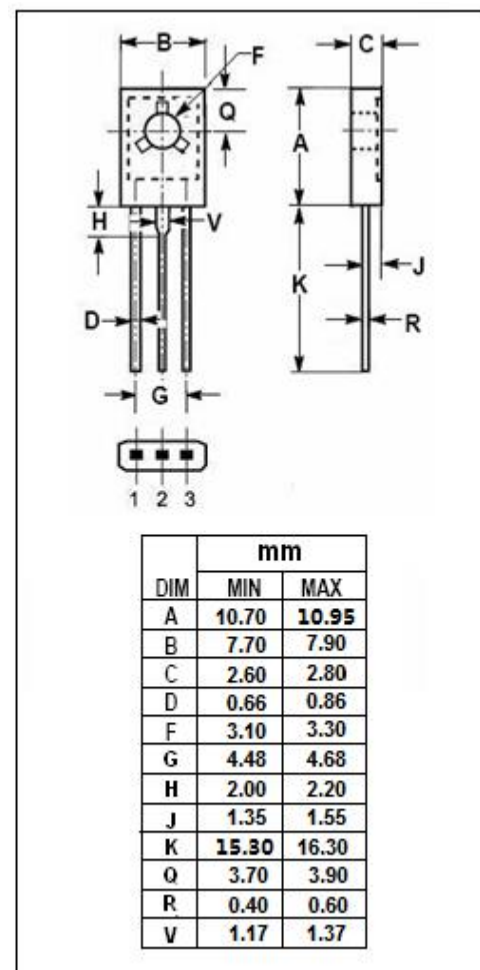
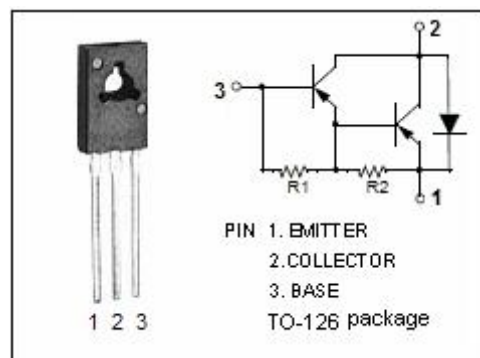
- High DC Current Gain-
: $h_{FE} = 2000(\text{Min}) @ (V_{CE} = -2V, I_C = -1A)$
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -1.5V(\text{Max.}) @ I_C = -1A$
- Built-in a diode at C-E
- Complement to Type 2SD985
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for general-purpose amplifier ,hammer driver and switching applications.

ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-8	V
I_C	Collector Current-Continuous	-1.5	A
I_{CM}	Collector Current-Peak	-3.0	A
P_C	Collector Power Dissipation $T_a = 25^\circ\text{C}$	1.0	W
	Collector Power Dissipation $T_C = 25^\circ\text{C}$	10	
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -1A; I_B = -1mA$			-1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -1A; I_B = -1mA$			-2.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -60V; I_E = 0$			-1.0	uA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -5V; I_C = 0$			-1.0	mA
h_{FE-1}	DC Current Gain	$I_C = -0.5A; V_{CE} = -2V$	1000			
h_{FE-2}	DC Current Gain	$I_C = -1A; V_{CE} = -2V$	2000		30000	

Switching Times

t_{on}	Turn-on Time	$I_C = -1A; I_{B1} = -I_{B2} = -1mA,$ $R_L = 50\Omega, V_{CC} = -50V$		0.5		μs
t_{stg}	Storage Time			1.0		μs
t_f	Fall Time			1.0		μs

◆ h_{FE2} Classifications

M	L	K
2000-5000	4000-10000	8000-30000

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