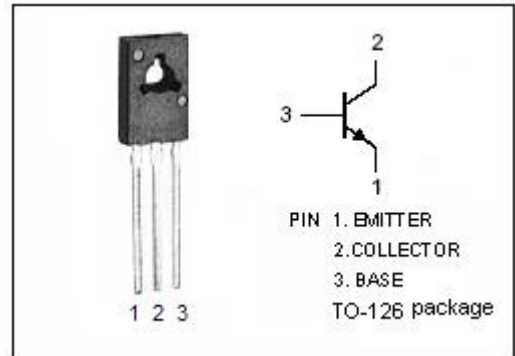


isc Silicon NPN Power Transistor
2SC2594
DESCRIPTION

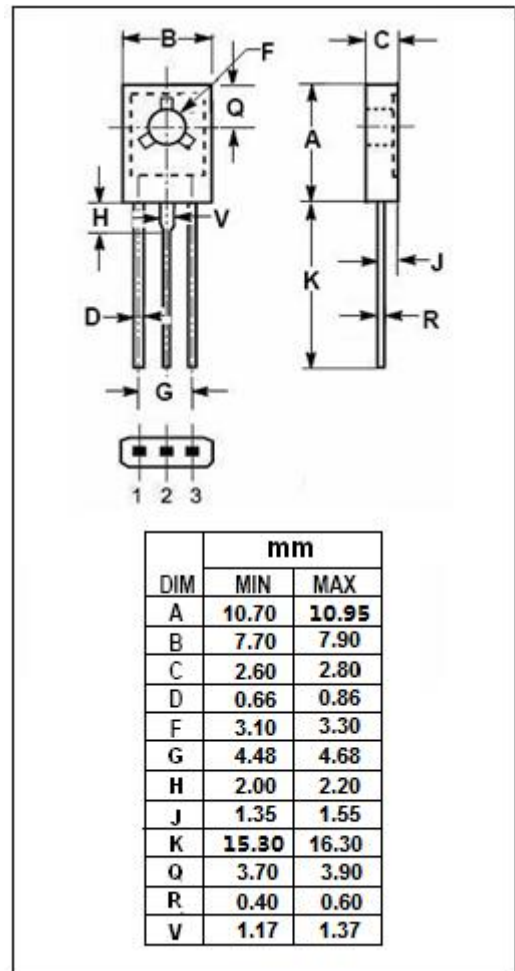
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 20V(\text{Min})$
- Good Linearity of h_{FE}
- Low Collector Saturation Voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- AF power amplifier
- For electronic flash unit
- Converter


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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	20	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	8	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	10	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor

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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 1mA; I _B = 0	20			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 10 μA; I _C = 0	7			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A; I _B = 0.1A			1.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 10V; I _E = 0			0.1	μA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 7V; I _C = 0			0.1	μA
h _{FE-1}	DC Current Gain	I _C = 0.5A; V _{CE} = 2V	140		450	
h _{FE-2}	DC Current Gain	I _C = 1A; V _{CE} = 2V	70			
f _T	Current-Gain—Bandwidth Product	I _E = -50mA; V _{CB} = 6V		150		MHz
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 20V, f _{test} = 1MHz			50	pF

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