

isc Silicon NPN Power Transistor

BD158

DESCRIPTION

- Collector–Emitter Sustaining Voltage–
: $V_{CEO(SUS)} = 300V(\text{Min})$
- DC Current Gain–
: $h_{FE} = 30\sim 240(\text{Min}) @ I_C = 50mA$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

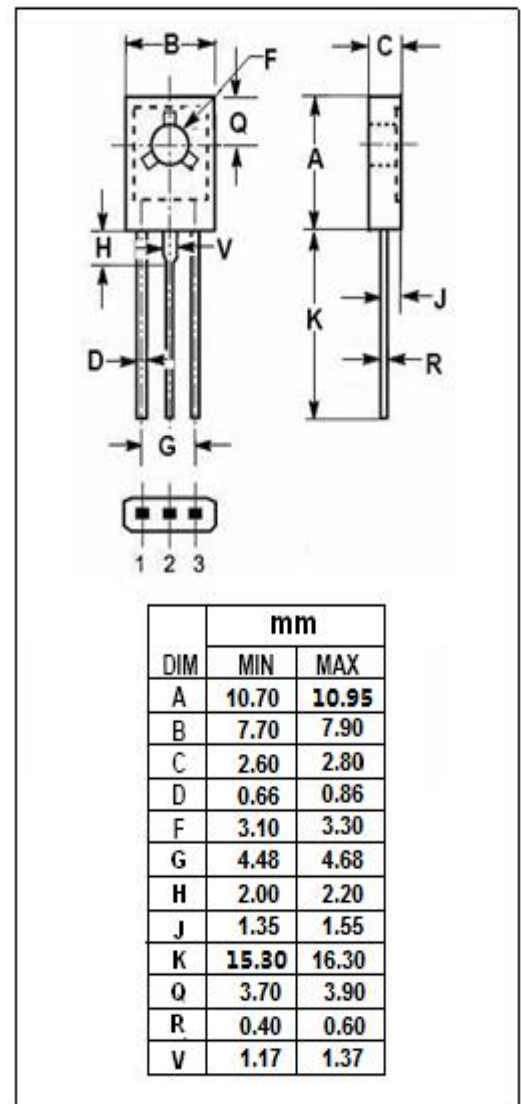
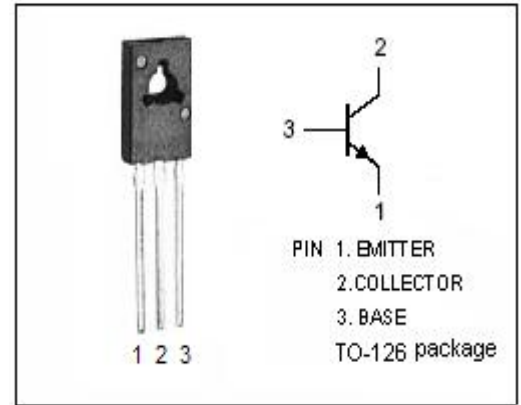
- Designed for power output stages for television, radio, phonograph and other consumer product applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	325	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	0.5	A
I_{CM}	Collector Current-Peak	1.0	A
I_B	Base Current-Continuous	0.25	A
P_C	Collector Power Dissipation $T_C=25^\circ\text{C}$	20	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	6.25	$^\circ\text{C/W}$



isc Silicon NPN Power Transistor**BD158****ELECTRICAL CHARACTERISTICS****T_c =25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 1.0mA; I _B = 0	300		V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 0.1mA; I _E = 0	325		V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 0.1mA; I _C = 0	5		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 50mA; I _B = 5mA		1.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 325V; I _E = 0		0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0		0.1	mA
h _{FE}	DC Current Gain	I _C = 50m A; V _{CE} = 10V	30	240	

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