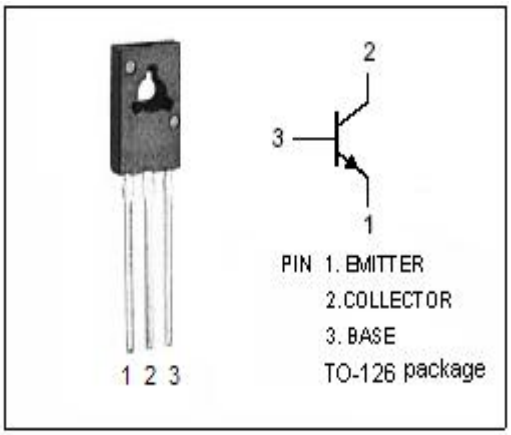
isc Silicon NPN Power Transistor — BD157



DESCRIPTION

- Collector–Emitter Sustaining Voltage–
  : $V_{CEO(SUS)}$ = 250V(Min)
- DC Current Gain–
  : h_{FE} = 30~240(Min) @ I_C= 50mA
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

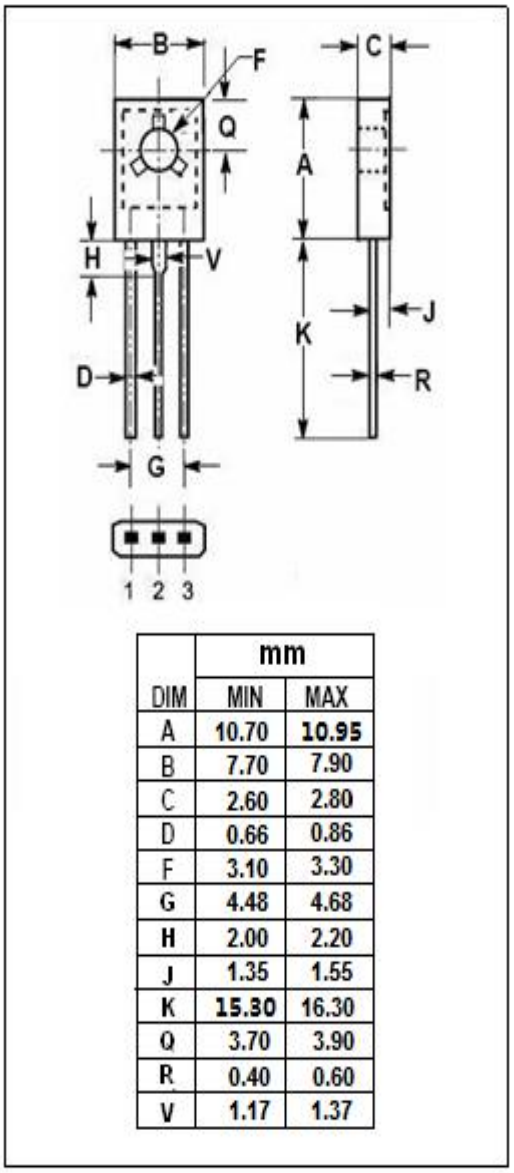
- Designed for power output stages for television, radio, phonograph and other consumer product applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	275	V
V_{CEO}	Collector-Emitter Voltage	250	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℃	20	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

THERMAL CHARACTERISTICS

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



DIM	mm MIN	MAX
A	10.70	10.95
B	7.70	7.90
C	2.60	2.80
D	0.66	0.86
F	3.10	3.30
G	4.48	4.68
H	2.00	2.20
J	1.35	1.55
K	15.30	16.30
Q	3.70	3.90
R	0.40	0.60
V	1.17	1.37

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ELECTRICAL CHARACTERISTICS

T_C =25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 1.0mA; I_B= 0	250		V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 0.1mA; I_E= 0	275		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}= 275V; 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	