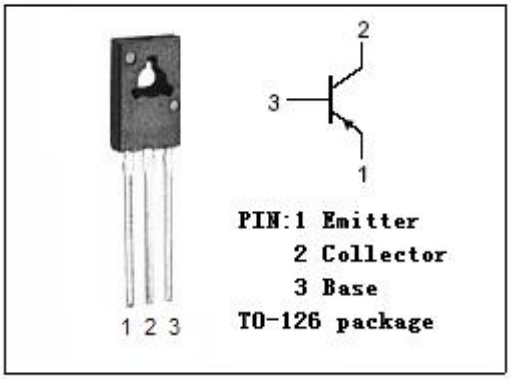
isc Silicon PNP Power Transistor — 2SB1658

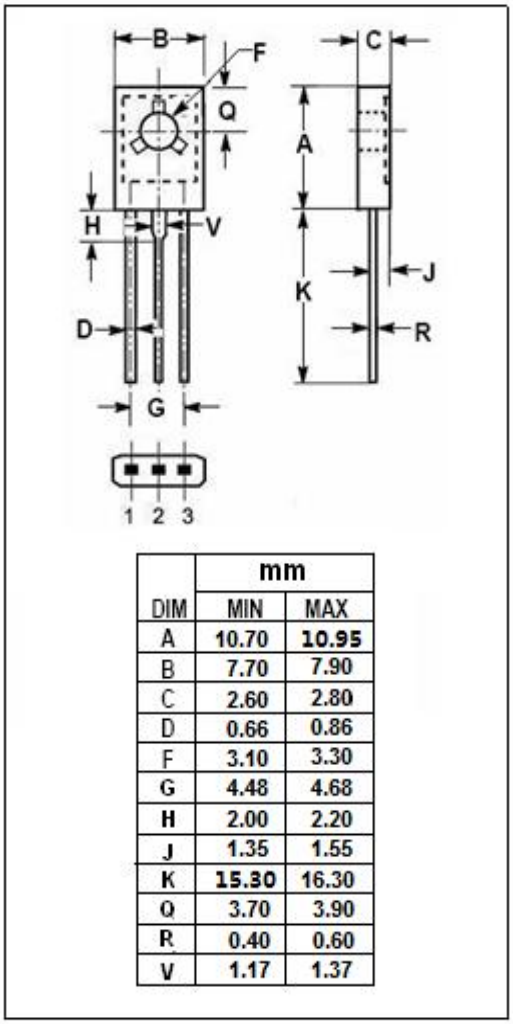
DESCRIPTION

- High Collector Current -I_C= -5A
- High DC Current Gain-
  : h_{FE}= 150~600@I_C= -1A
- Low-Collector Saturation Voltage-
  : $V_{CE(sat)}$= -0.15V(Max.)@I_C= -1A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Designed for audio frequency amplifier and switching applications.



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

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-30	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-5	A
I_{CP}	Collector Current-Pulse	-10	A
I_B	Base Current-Continuous	-2	A
P_C	Collector Power Dissipation @ T_C=25℃	10	W
	Collector Power Dissipation @ T_a=25℃	1	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= -1A; I_B= -50mA			-0.15	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= -2A; I_B= -0.1A			-0.25	V
$V_{CE(sat)-3}$	Collector-Emitter Saturation Voltage	I_C= -4A; I_B= -0.2A			-0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -1A; I_B= -0.1A			-1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -30V; I_E= 0			-0.1	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -6V; I_C= 0			-0.1	μA
h_{FE-1}	DC Current Gain	I_C= -1A; V_{CE}= -2V	150		600	
h_{FE-2}	DC Current Gain	I_C= -4A; V_{CE}= -2V	50			
C_{OB}	Output Capacitance	I_E=0; V_{CB}= -10V, f_{test}= 1MHz		100		pF