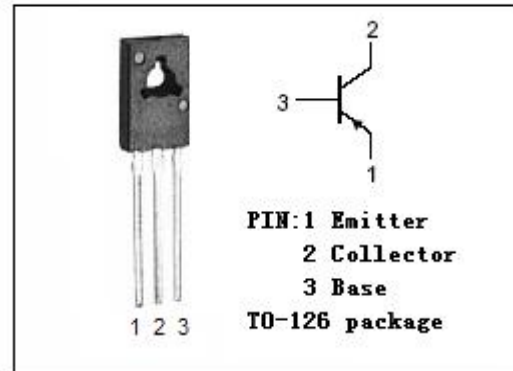


isc Silicon PNP Power Transistor
2SB1658
DESCRIPTION

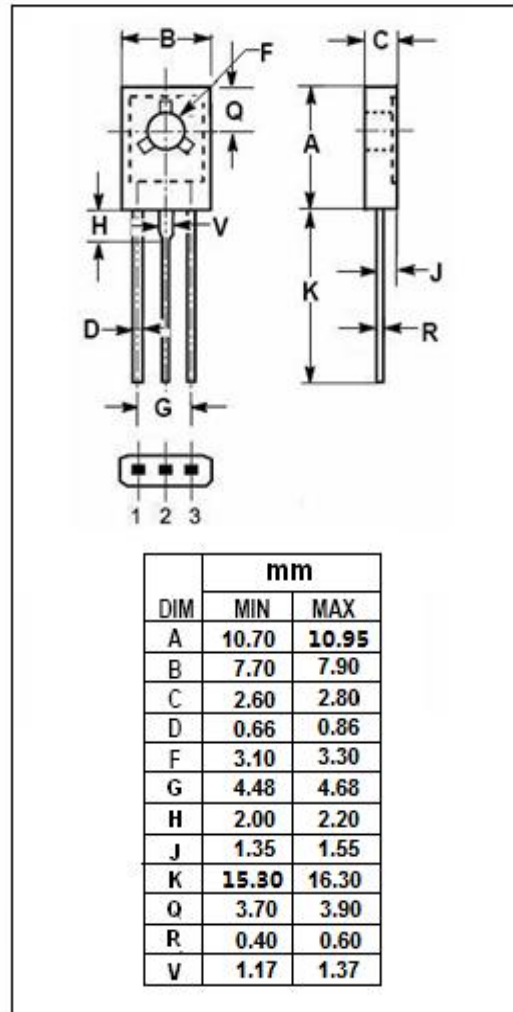
- High Collector Current $-I_C = -5A$
- High DC Current Gain-
: $h_{FE} = 150 \sim 600 @ I_C = -1A$
- Low-Collector Saturation Voltage-
: $V_{CE(sat)} = -0.15V(\text{Max.}) @ I_C = -1A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for audio frequency amplifier and switching applications.


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

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 @ $T_C = 25^\circ\text{C}$	10	W
	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	1	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS
 $T_C=25^\circ\text{C}$ unless otherwise specified

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

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