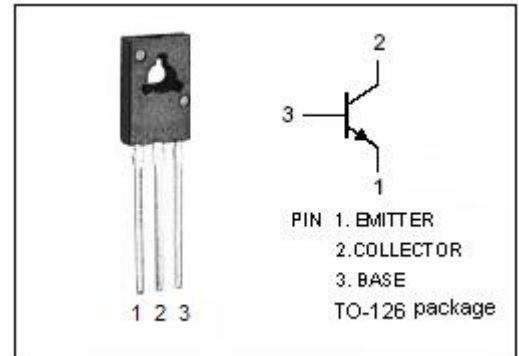


**isc Silicon NPN Power Transistor**
**2SD862**
**DESCRIPTION**

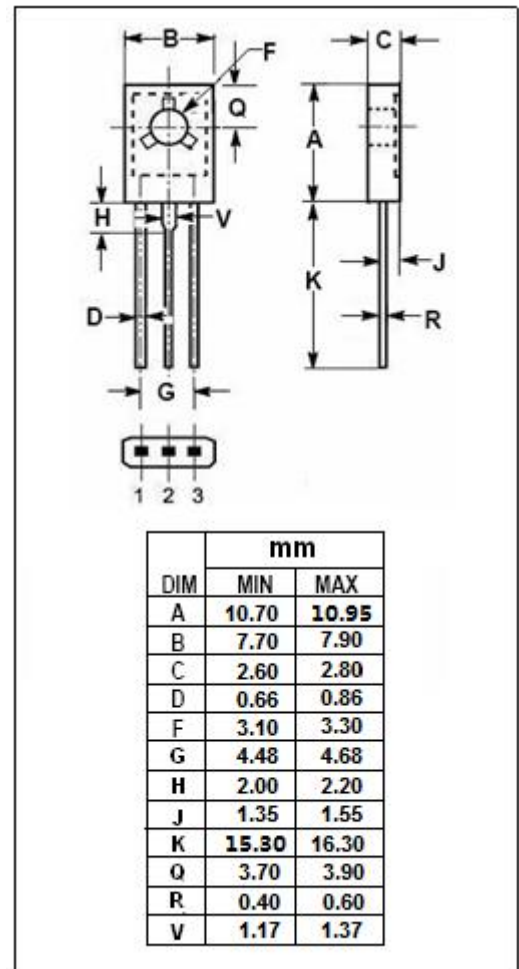
- High Collector Current- $I_C= 2A$
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO}= 20V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Low Saturation Voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for high frequency, Low  $V_{ce(sat)}$  middle power transistors in a plastic envelope, primarily for use in audio and general purpose applications.


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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	20	V
$V_{CEO}$	Collector-Emitter Voltage	20	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current-Continuous	2	A
$I_B$	Base Current-Continuous	0.5	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****2SD862****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C=1\text{mA}; I_E=0$	20			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=1\text{mA}; R_{BE}=\infty$	20			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=1\text{mA}; I_C=0$	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=1.5\text{A}; I_B=0.15\text{A}$			0.5	V
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			200	$\mu\text{A}$
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=20\text{V}; I_E=0$			100	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$I_C=100\text{mA}; V_{CE}=2\text{V}$	60		400	
$f_T$	Current-Gain—Bandwidth Product	$I_C=0.5\text{A}; V_{CE}=12\text{V}$		80		MHz
$C_{OB}$	Output Capacitance	$I_E=0; V_{CB}=10\text{V}, f_{test}=1\text{MHz}$		75		pF

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