

isc Silicon NPN Power Transistor
BD162
DESCRIPTION

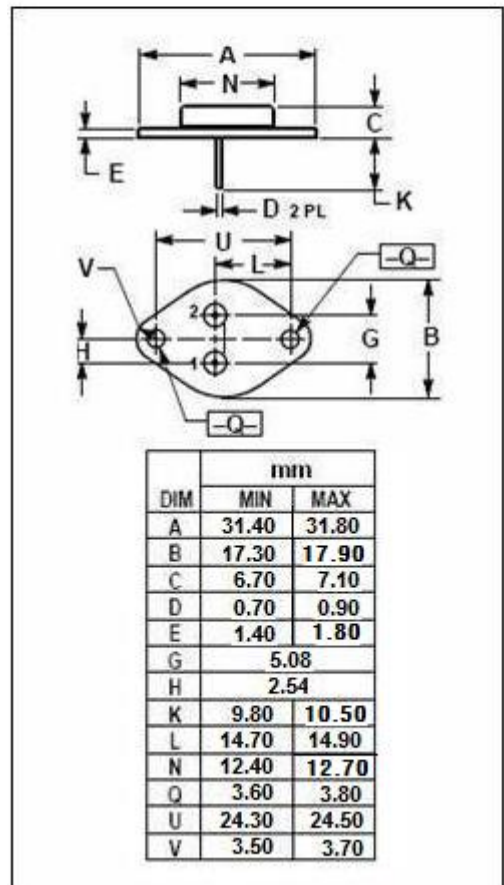
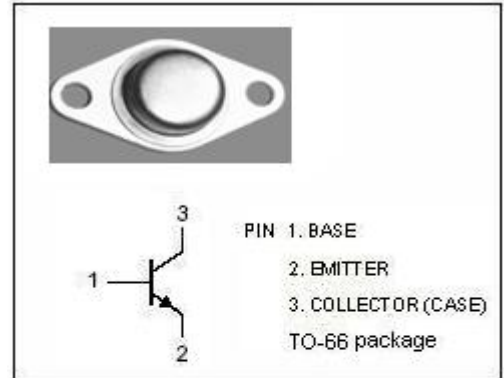
- Continuous Collector Current $-I_C = 4A$
- Excellent Safe Operating Area
- Good Linearity of h_{FE}
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for general purpose switching and amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	20	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	4	A
I_B	Base Current-Continuous	2	A
P_C	Collector Power Dissipation@ $T_C=25^\circ C$	15	W
T_J	Junction Temperature	175	$^\circ C$
T_{stg}	Storage Temperature	-65~175	$^\circ C$



isc Silicon NPN Power Transistor**BD162****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEQ(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C= 10\text{mA}$; $I_B= 0$	20		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C= 1\text{A}$; $I_B= 0.1\text{A}$		1.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C= 3\text{A}$; $I_B= 0.3\text{A}$		2.0	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	$I_C= 1\text{A}$; $I_B= 0.1\text{A}$		2.0	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	$I_C= 3\text{A}$; $I_B= 0.3\text{A}$		3.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB}= 40\text{V}$; $I_E= 0$		100	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 5\text{V}$; $I_C=0$		100	μA
h_{FE-1}	DC Current Gain	$I_C= 1\text{A}$; $V_{CE}= 2\text{V}$	30	150	
h_{FE-2}	DC Current Gain	$I_C= 4\text{A}$; $V_{CE}= 2\text{V}$	5		

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