

**isc Silicon PNP Power Transistors**

**BD350**

**DESCRIPTION**

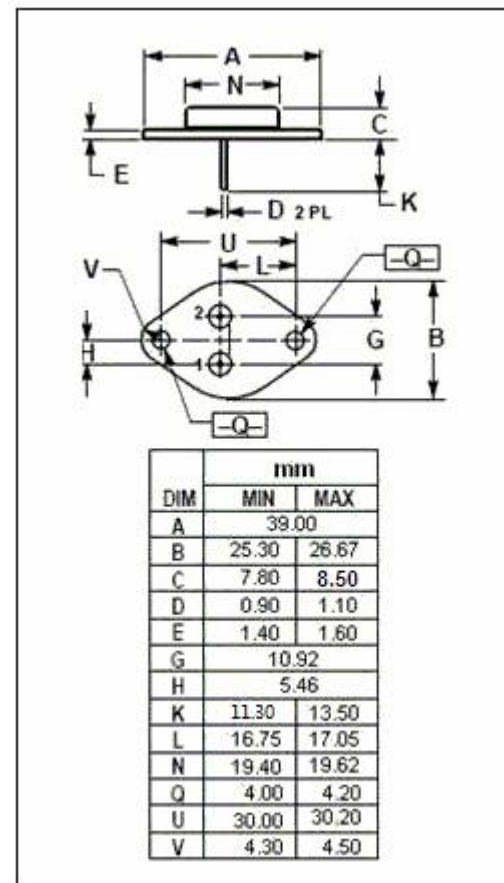
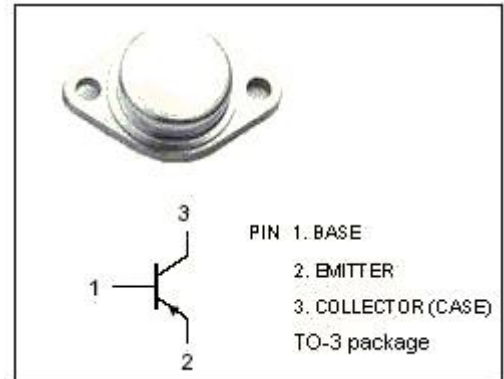
- Low Collector Saturation Voltage-  
:  $V_{CE(sat)} = -1.0V(\text{Max.}) @ I_C = -15A$
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for use in power amplifier and switching circuits.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-80	V
$V_{CEO}$	Collector-Emitter Voltage	-80	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-30	A
$I_{CM}$	Collector Current-Peak	-50	A
$I_B$	Base Current-Continuous	-7.5	A
$P_C$	Collector Power Dissipation@ $T_a=25^\circ\text{C}$	5	W
	Collector Power Dissipation@ $T_c=25^\circ\text{C}$	160	
$T_J$	Junction Temperature	175	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-65~175	$^\circ\text{C}$



**isc Silicon PNP Power Transistors****BD350****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CE0(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C = -50\text{mA}$ ; $I_B = 0$	-80		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C = -10\text{A}$ ; $I_B = -1\text{A}$		-0.8	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C = -15\text{A}$ ; $I_B = -1.5\text{A}$		-1.0	V
$V_{CE(sat)-3}$	Collector-Emitter Saturation Voltage	$I_C = -20\text{A}$ ; $I_B = -2\text{A}$		-2.0	V
$V_{CE(sat)-4}$	Collector-Emitter Saturation Voltage	$I_C = -30\text{A}$ ; $I_B = -6\text{A}$		-4.0	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	$I_C = -10\text{A}$ ; $I_B = -1\text{A}$		-1.6	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	$I_C = -15\text{A}$ ; $I_B = -1.5\text{A}$		-1.8	V
$V_{BE(sat)-3}$	Base-Emitter Saturation Voltage	$I_C = -20\text{A}$ ; $I_B = -2\text{A}$		-2.5	V
$I_{CEO}$	Collector Cutoff Current	$V_{CE} = -80\text{V}$ ; $I_B = 0$		-0.5	mA
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -80\text{V}$ ; $I_E = 0$		-0.1	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -5\text{V}$ ; $I_C = 0$		-0.1	mA
$h_{FE-1}$	DC Current Gain	$I_C = -1\text{A}$ ; $V_{CE} = -2\text{V}$	40		
$h_{FE-2}$	DC Current Gain	$I_C = -15\text{A}$ ; $V_{CE} = -2\text{V}$	20	60	
$h_{FE-3}$	DC Current Gain	$I_C = -30\text{A}$ ; $V_{CE} = -4\text{V}$	5		
$f_T$	Current-Gain—Bandwidth Product	$I_C = -1\text{A}$ ; $V_{CE} = -10\text{V}$ ; $f_{test} = 1.0\text{MHz}$	4		MHz

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