

**isc Silicon NPN Power Transistor****BD226/228/230****DESCRIPTION**

- DC Current Gain-  
:  $h_{FE} = 40(\text{Min}) @ I_C = 0.15\text{A}$
- Complement to Type BD227/229/231

**APPLICATIONS**

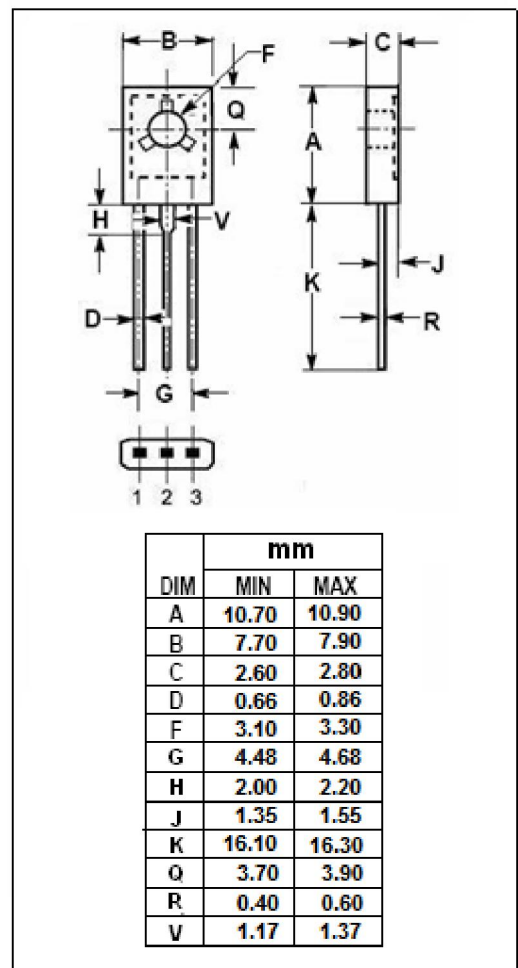
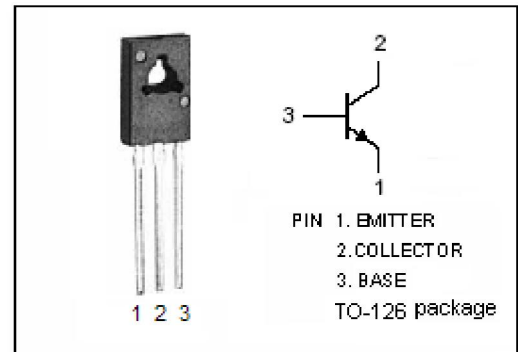
- Designed for use in driver stages in television circuits.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	BD226	45
		BD228	60
		BD230	100
$V_{CEO}$	Collector-Emitter Voltage	BD226	45
		BD228	60
		BD230	80
$V_{CER}$	Collector-Emitter Voltage( $R_{BE} = 1\text{k}\Omega$ )	BD226	45
		BD228	60
		BD230	100
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	1.5	A
$I_{CM}$	Collector Current-Peak	3.0	A
$P_C$	Collector Power Dissipation @ $T_C \leq 62^\circ\text{C}$	12.5	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-65~150	$^\circ\text{C}$

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	7	$^\circ\text{C/W}$
$R_{th j-a}$	Thermal Resistance, Junction to Ambient	100	$^\circ\text{C/W}$



**isc Silicon NPN Power Transistor****BD226/228/230****ELECTRICAL CHARACTERISTICS****T<sub>C</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEQ(SUS)</sub>	Collector-Emitter Sustaining Voltage	BD226	I <sub>C</sub> = 100mA ; I <sub>B</sub> = 0	45			V
		BD228		60			
		BD230		80			
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage		I <sub>C</sub> = 1A; I <sub>B</sub> = 0.1A			0.8	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage		I <sub>C</sub> = 1A; V <sub>CE</sub> = 2V			1.3	V
I <sub>CBO</sub>	Collector Cutoff Current		V <sub>CB</sub> = 30V; I <sub>E</sub> = 0 V <sub>CB</sub> = 30V; I <sub>E</sub> = 0, T <sub>C</sub> =125°C			0.1 10	μ A
I <sub>EBO</sub>	Emitter Cutoff Current		V <sub>EB</sub> = 5V; I <sub>C</sub> =0			10	μ A
h <sub>FE-1</sub>	DC Current Gain		I <sub>C</sub> = 5mA ; V <sub>CE</sub> = 2V	25			
h <sub>FE-2</sub>	DC Current Gain		I <sub>C</sub> = 1A ; V <sub>CE</sub> = 2V	25			
h <sub>FE-3</sub>	DC Current Gain		I <sub>C</sub> = 0.15A ; V <sub>CE</sub> = 2V	40		250	
f <sub>T</sub>	Current-Gain—Bandwidth Product		I <sub>C</sub> = 50mA ; V <sub>CE</sub> = 5V		125		MHz