

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
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

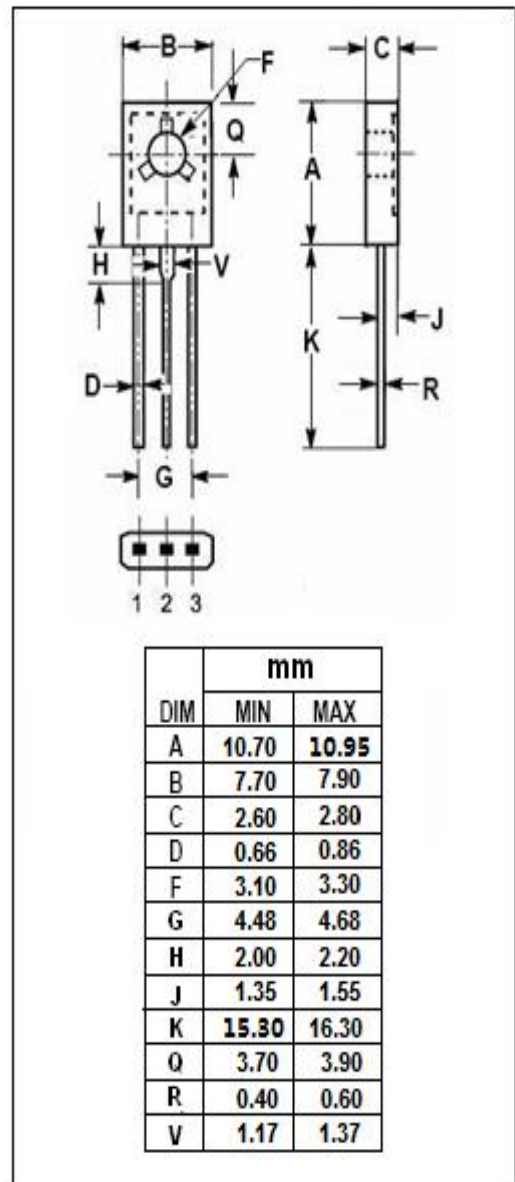
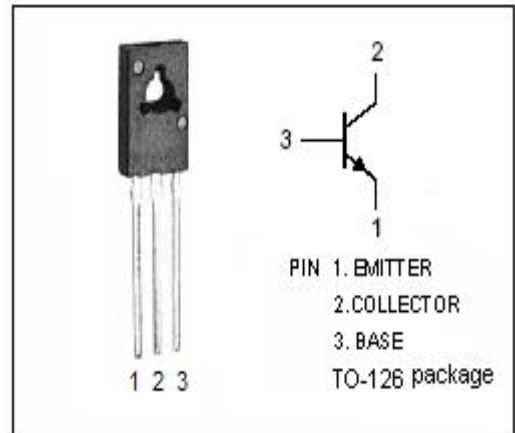
- Designed for use in driver stages in television circuits.

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

SYMBOL	PARAMETER	VALUE	UNIT	
V_{CBO}	Collector-Base Voltage	BD226	45	V
		BD228	60	
		BD230	100	
V_{CEO}	Collector-Emitter Voltage	BD226	45	V
		BD228	60	
		BD230	80	
V_{CER}	Collector-Emitter Voltage($R_{BE} = 1k\Omega$)	BD226	45	V
		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	$^\circ\text{C}/\text{W}$
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient	100	$^\circ\text{C}/\text{W}$



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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-Emitter Sustaining Voltage	BD226	45			V
		BD228	60			
		BD230	80			
		I _C = 50mA ; I _B = 0				
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 1A; I _B = 0.1A			0.8	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 1A; V _{CE} = 2V			1.3	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 30V; I _E = 0 V _{CB} = 30V; I _E = 0, T _C =125°C			0.1 10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C =0			10	μ A
h _{FE-1}	DC Current Gain	I _C = 5mA ; V _{CE} = 2V	25			
h _{FE-2}	DC Current Gain	I _C = 1A ; V _{CE} = 2V	25			
h _{FE-3}	DC Current Gain	I _C = 0.15A ; V _{CE} = 2V	40		250	
f _T	Current-Gain—Bandwidth Product	I _C = 50mA ; V _{CE} = 5V		125		MHz

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