

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

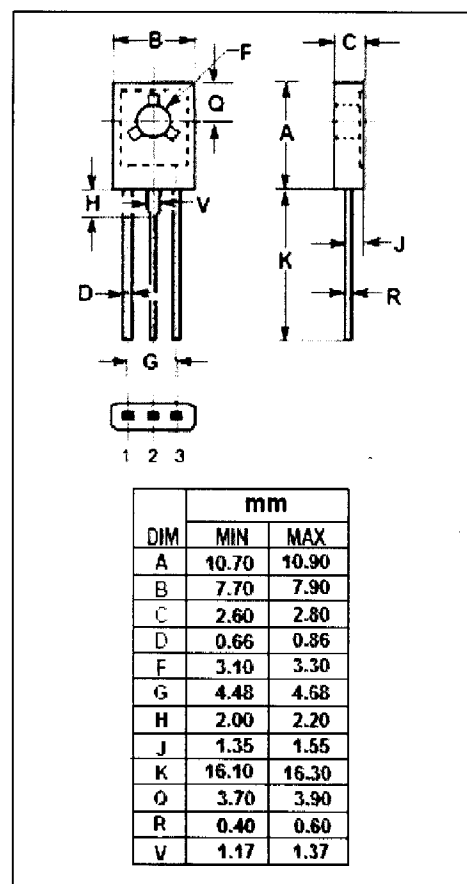
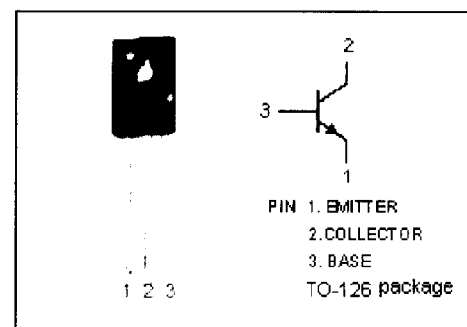
- Designed for use in driver stages in television circuits.

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($R_{BE} = 1k\Omega$)	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	$^\circ\text{C/W}$



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ELECTRICAL CHARACTERISTICS

$T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	BD226	45			V
		BD228	60			
		BD230	80			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=1\text{A}; I_B=0.1\text{A}$			0.8	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C=1\text{A}; V_{CE}=2\text{V}$			1.3	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=30\text{V}; I_E=0$ $V_{CB}=30\text{V}; I_E=0; T_C=125^\circ\text{C}$			0.1 10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			10	μA
h_{FE-1}	DC Current Gain	$I_C=5\text{mA}; V_{CE}=2\text{V}$	25			
h_{FE-2}	DC Current Gain	$I_C=1\text{A}; V_{CE}=2\text{V}$	25			
h_{FE-3}	DC Current Gain	$I_C=0.15\text{A}; V_{CE}=2\text{V}$	40		250	
f_T	Current-Gain—Bandwidth Product	$I_C=50\text{mA}; V_{CE}=5\text{V}$		125		MHz