

isc Silicon NPN Power Transistor

BD232

DESCRIPTION

- Good Linearity of h_{FE}
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 300V(\text{Min})$

APPLICATIONS

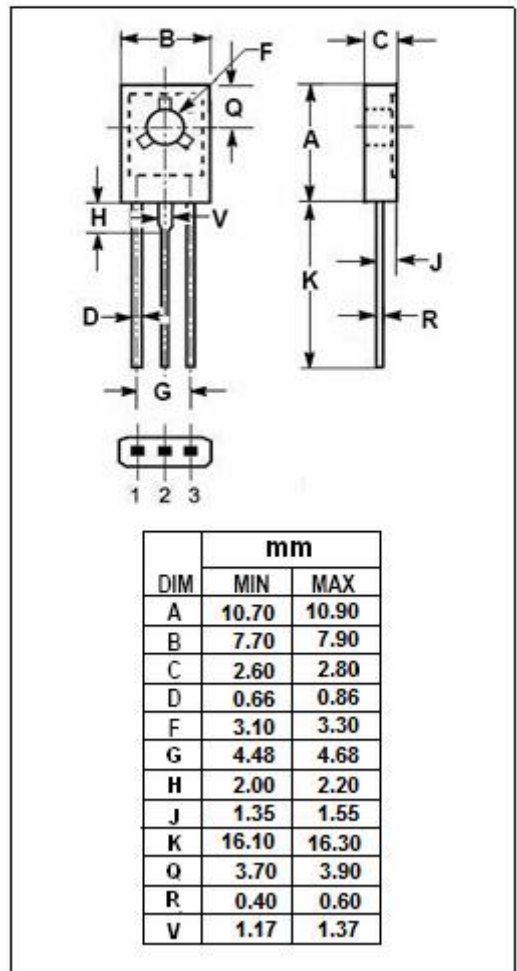
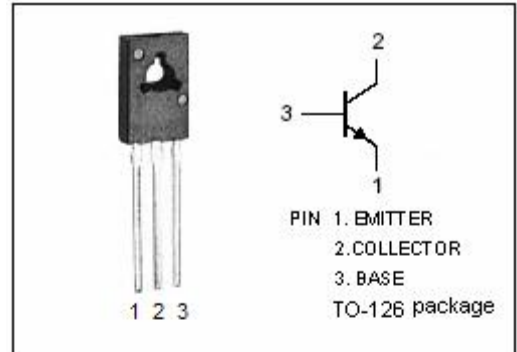
- Designed for use in power output stages and line driver in TV receivers.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage	500	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current-Continuous	0.5	A
I_B	Base Current-Continuous	0.25	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	20	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	6.25	$^\circ\text{C/W}$



isc Silicon NPN Power Transistor**BD232****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	$I_C=10\text{mA}; I_B=0$	300			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=150\text{mA}; I_B=15\text{mA}$			1.0	V
I_{CES}	Collector Cutoff Current	$V_{CE}=500\text{V}; V_{BE}=0$			100	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			10	μA
h_{FE-1}	DC Current Gain	$I_C=50\text{mA}; V_{CE}=5\text{V}$	25		150	
h_{FE-2}	DC Current Gain	$I_C=150\text{mA}; V_{CE}=5\text{V}$	20			