

Silicon NPN Power Transistor

BD232

DESCRIPTION

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

APPLICATIONS

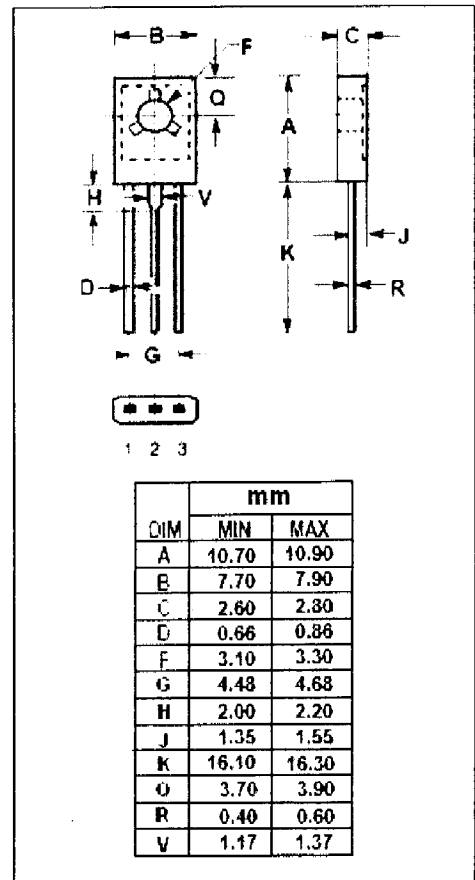
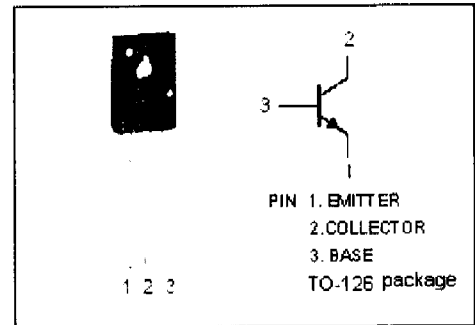
- Designed for use in power output stages and line driver in TV receivers.

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

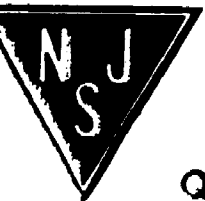
SYMBOL	PARAMETER	VALUE	UNIT
$V_{CES}$	Collector-Emitter Voltage	500	V
$V_{CEO}$	Collector-Emitter Voltage	300	V
$V_{EBO}$	Emitter-Base Voltage	5.0	V
$I_C$	Collector Current-Continuous	0.5	A
$I_B$	Base Current-Continuous	0.25	A
$P_C$	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	20	W
$T_J$	Junction 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	$^\circ\text{C/W}$



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**Silicon NPN Power Transistor****BD232****ELECTRICAL CHARACTERISTICS****T<sub>C</sub>=25°C unless otherwise specified**

<b>SYMBOL</b>	<b>PARAMETER</b>	<b>CONDITIONS</b>	<b>MIN</b>	<b>TYP.</b>	<b>MAX</b>	<b>UNIT</b>
V <sub>CE(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = 10mA; I <sub>B</sub> = 0	300			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 150mA; I <sub>B</sub> = 15mA			1.0	V
I <sub>CES</sub>	Collector Cutoff Current	V <sub>CE</sub> = 500V; V <sub>BE</sub> = 0			100	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> = 50mA; V <sub>CE</sub> = 5V	25		150	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 150mA; V <sub>CE</sub> = 5V	20			