

isc Silicon PNP Power Transistor

2SB1009

DESCRIPTION

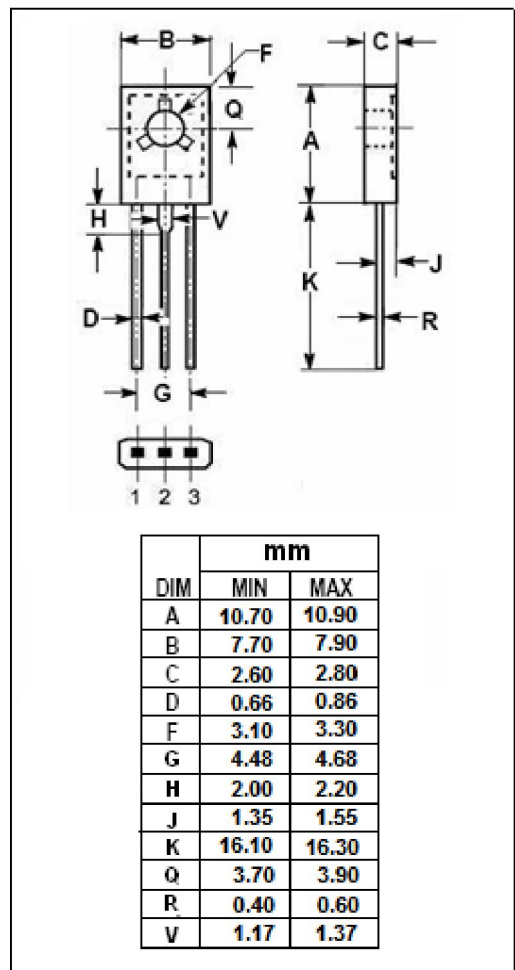
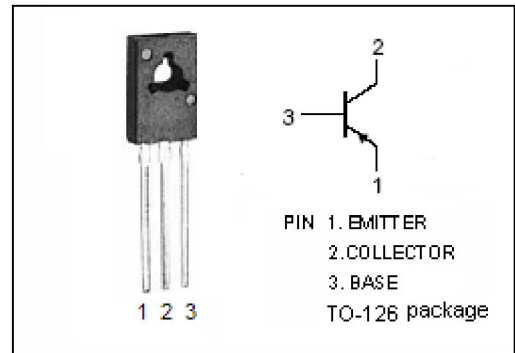
- High Collector Current $-I_C = -2A$
- Collector-Emitter Breakdown Voltage:
: $V_{(BR)CEO} = -32V(\text{Min})$
- Good Linearity of h_{FE}
- Low Saturation Voltage
- Complement to Type 2SD1380

APPLICATIONS

- Designed for low frequency power amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-32	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-2	A
I_{CP}	Collector Current-Pulse	-3	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	10	W
	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	1.2	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor**2SB1009****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -1\text{mA}; I_B = 0$	-32			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -50\ \mu\text{A}; I_E = 0$	-40			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -50\ \mu\text{A}; I_C = 0$	-5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -2\text{A}; I_B = -0.2\text{A}$			-0.8	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -20\text{V}; I_E = 0$			-1.0	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -4\text{V}; I_C = 0$			-1.0	μA
h_{FE}	DC Current Gain	$I_C = -0.5\text{A}; V_{CE} = -5\text{V}$	82		390	
f_T	Current-Gain—Bandwidth Product	$I_C = -0.5\text{A}; V_{CE} = -5\text{V}$		100		MHz
C_{OB}	Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f_{test} = 1\text{MHz}$		50		pF

◆ **h_{FE} Classifications**

P	Q	R
82-180	120-270	180-390