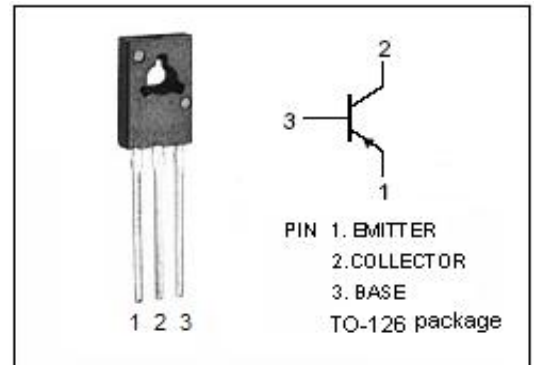


isc Silicon PNP Power Transistor
2SA1209
DESCRIPTION

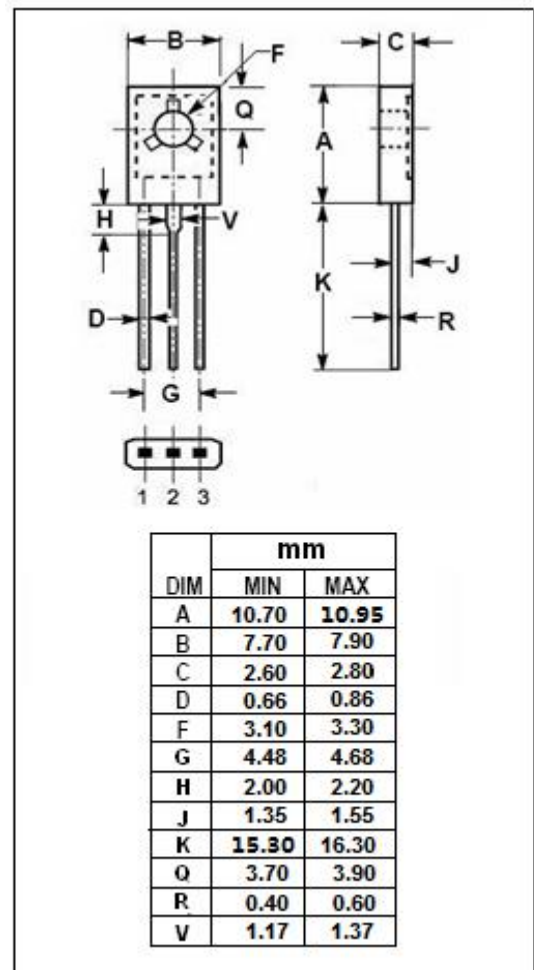
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -160V(\text{Min})$
- Good Linearity of h_{FE}
- High Switching Speed
- Complement to Type 2SC2911
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for high-voltage switching and AF 100W predriver applications.


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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-180	V
V_{CEO}	Collector-Emitter Voltage	-160	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-140	mA
I_{CP}	Collector Current-Pulse	-200	mA
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	-10	W
	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	-1	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor**2SA1209****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -50\text{mA}; I_B = -5\text{mA}$			-0.3	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -80\text{V}; I_E = 0$			-0.1	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -4\text{V}; I_C = 0$			-0.1	μA
h_{FE}	DC Current Gain	$I_C = -10\text{mA}; V_{CE} = -5\text{V}$	100		400	
f_T	Current-Gain—Bandwidth Product	$I_C = -10\text{mA}; V_{CE} = -10\text{V}$		150		MHz
C_{OB}	Collector Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f = -1\text{MHz}$		3		pF

◆ **h_{FE} Classifications**

R	S	T
100-200	140-280	200-400

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