

**Silicon PNP Power Transistor**

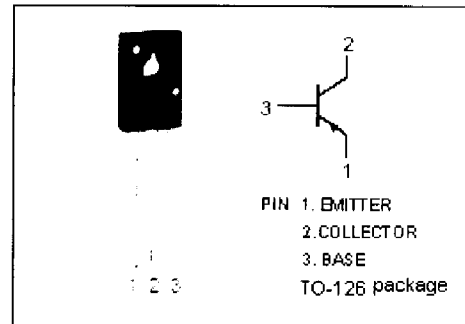
**2SA1096**

**DESCRIPTION**

- High Collector-Emitter Breakdown Voltage-  
 $V_{(BR)CEO} = -50V$  (Min)
- Good Linearity of  $h_{FE}$
- Complement to Type 2SC2497

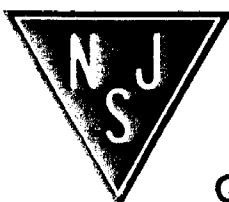
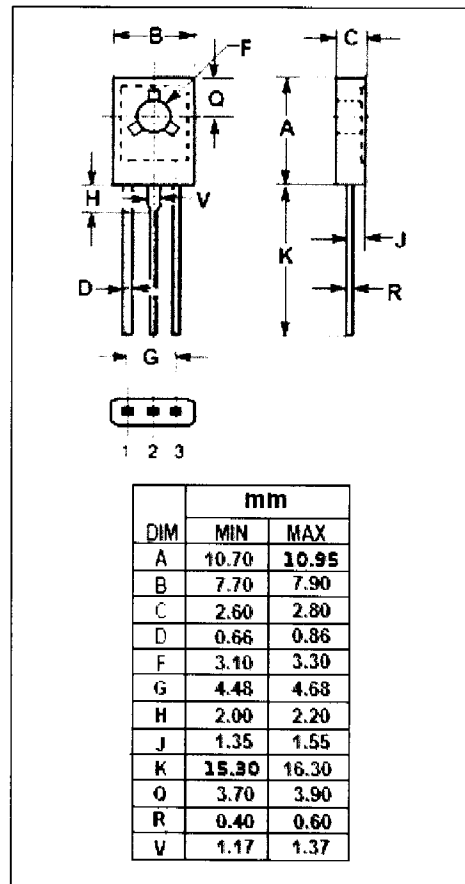
**APPLICATIONS**

- Designed for low-frequency power amplification



**ABSOLUTE MAXIMUM RATINGS(Ta=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-70	V
$V_{CEO}$	Collector-Emitter Voltage	-50	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-2	A
$I_{CM}$	Collector Current-Peak	-3	A
$P_C$	Collector Power Dissipation @ $T_a=25^\circ C$	1.2	W
	Total Power Dissipation @ $T_C=25^\circ C$	5	
$T_J$	Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ C$



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# 2SA1096

## 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	$I_C = -2\text{mA}; I_B = 0$	-50			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -1\text{mA}; I_E = 0$	-70			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -1.5\text{A}; I_B = -0.15\text{A}$			-1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -1.5\text{A}; I_B = -0.15\text{A}$			-1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -20\text{V}; I_E = 0$			-1	$\mu\text{A}$
$I_{CEO}$	Collector Cutoff Current	$V_{CE} = -10\text{V}; I_B = 0$			-100	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -5\text{V}; I_C = 0$			-10	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$I_C = -1\text{A}; V_{CE} = -5\text{V}$	80		220	
$f_T$	Current-Gain—Bandwidth Product	$I_E = 0.5\text{A}; V_{CB} = -5\text{V}; f = 200\text{MHz}$		150		MHz
$C_{OB}$	Output Capacitance	$I_E = 0; V_{CB} = -20\text{V}; f = 1.0\text{MHz}$		55		pF

### ◆ $h_{FE}$ Classifications

Q	R
80-160	120-220