

**isc Silicon PNP Power Transistor**

**2SA1103**

**DESCRIPTION**

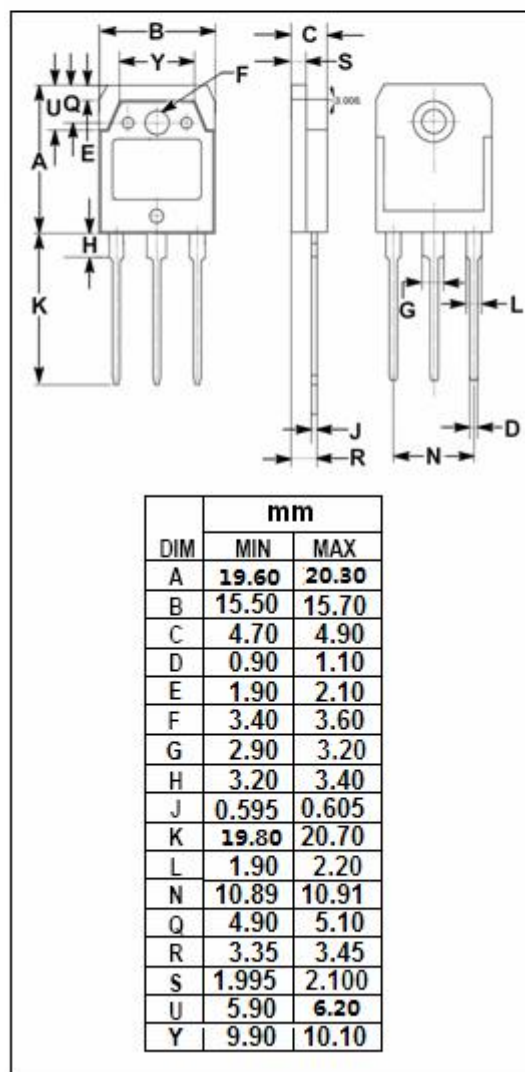
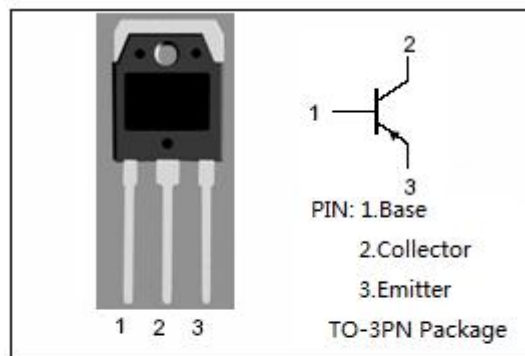
- Collector-Emitter Breakdown Voltage-  
 $V_{(BR)CEO} = -100V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for audio power amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-100	V
$V_{CEO}$	Collector-Emitter Voltage	-100	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_C$	Collector Current-Continuous	-7	A
$I_B$	Base Current-Continuous	-3	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	70	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



**isc Silicon PNP Power Transistor****2SA1103****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	$I_C = -50\text{mA}; I_B = 0$	-100			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -3\text{A}; I_B = -0.3\text{A}$			-1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -100\text{V}; I_E = 0$			-10	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -6\text{V}; I_C = 0$			-10	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$I_C = -3\text{A}; V_{CE} = -4\text{V}$	50		180	
$f_T$	Current-Gain—Bandwidth Product	$I_E = 0.5\text{A}; V_{CE} = -12\text{V}$		20		MHz
$C_{OB}$	Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f = 1.0\text{MHz}$		200		pF

◆  **$h_{FE}$  Classifications**

O	P	Y
50-100	70-140	90-180

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