

**Silicon PNP Power Transistor**

**2SB776**

**DESCRIPTION**

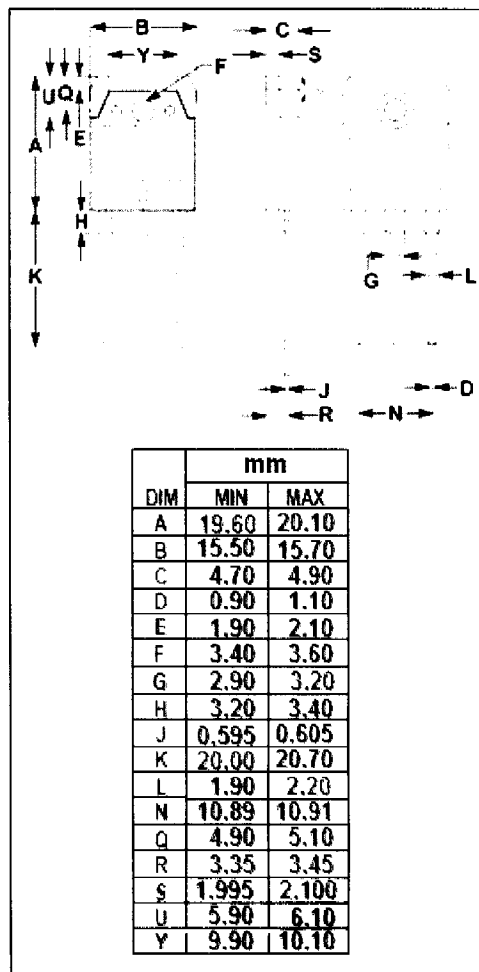
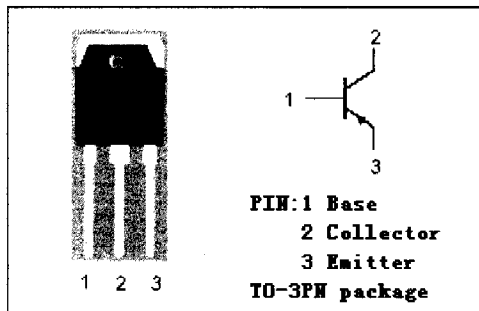
- Collector-Emitter Breakdown Voltage-  
 $V_{(BR)CEO} = -100V(\text{Min})$
- Good Linearity of  $h_{FE}$
- High Current Capability
- Wide Area of Safe Operation
- Complement to Type 2SD896

**APPLICATIONS**

- Designed for 40W audio frequency output applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-120	V
$V_{CEO}$	Collector-Emitter Voltage	-100	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_C$	Collector Current-Continuous	-7	A
$I_{CP}$	Collector Current-Pulse	-11	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	$^\circ\text{C}$



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## 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	$I_C = -10\text{mA}$ ; $R_{BE} = \infty$	-100			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -5\text{mA}$ ; $I_E = 0$	-120			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -5\text{mA}$ ; $I_C = 0$	-6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -4\text{A}$ ; $I_B = -0.4\text{A}$			-2.0	V
$V_{BE(on)}$	Base -Emitter On Voltage	$I_C = -1\text{A}$ ; $V_{CE} = -5\text{V}$			-1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -80\text{V}$ ; $I_E = 0$			-100	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -4\text{V}$ ; $I_C = 0$			-100	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C = -1\text{A}$ ; $V_{CE} = -5\text{V}$	60		200	
$h_{FE-2}$	DC Current Gain	$I_C = -4\text{A}$ ; $V_{CE} = -5\text{V}$	20			
$C_{OB}$	Output Capacitance	$V_{CB} = -10\text{V}$ ; $f_{test} = 1.0\text{MHz}$		200		pF
$f_T$	Current-Gain—Bandwidth Product	$I_C = -1\text{A}$ ; $V_{CE} = -5\text{V}$		15		MHz

### ◆ $h_{FE-1}$ Classifications

D	E
60-120	100-200