

## Silicon PNP Power Transistor

## 2SB595

### DESCRIPTION

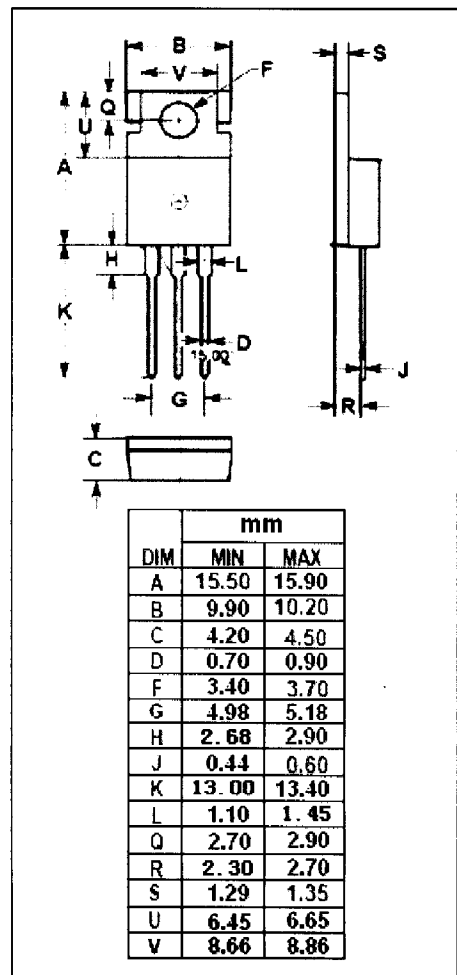
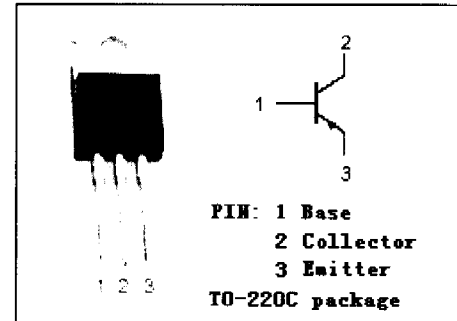
- Low Collector Saturation Voltage  
:  $V_{CE(sat)} = -2.0(V)(Max) @ I_C = -4A$
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -100V(Min)$
- Complement to Type 2SD525

### APPLICATIONS

- Power amplifier applications.
- Recommended for 30W high-fidelity audio frequency amplifier output stage.

### ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ C$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-100	V
$V_{CEO}$	Collector-Emitter Voltage	-100	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-5	A
$I_E$	Emitter Current-Continuous	5	A
$I_B$	Base Current-Continuous	-4	A
$P_C$	Total Power Dissipation @ $T_C=25^\circ C$	40	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ C$



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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	$I_C = -30\text{mA}; I_B = 0$	-100			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -10\text{mA}; I_C = 0$	-5			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	$I_C = -4\text{A}; V_{CE} = -5\text{V}$			-1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -100\text{V}; I_E = 0$			-0.1	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -5\text{V}; I_C = 0$			-1.0	mA
$h_{FE-1}$	DC Current Gain	$I_C = -1\text{A}; V_{CE} = -5\text{V}$	40		240	
$h_{FE-2}$	DC Current Gain	$I_C = -4\text{A}; V_{CE} = -5\text{V}$	20			
$f_T$	Current-Gain—Bandwidth Product	$I_C = -1\text{A}; V_{CE} = -5\text{V}$		5		MHz
$C_{OB}$	Collector Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f = 1\text{MHz}$		270		$\mu\text{s}$

### ◆ $h_{FE-1}$ Classifications

R	O	Y
40-80	70-140	120-240