

**Silicon NPN Power Transistor**

**2SC1162**

**DESCRIPTION**

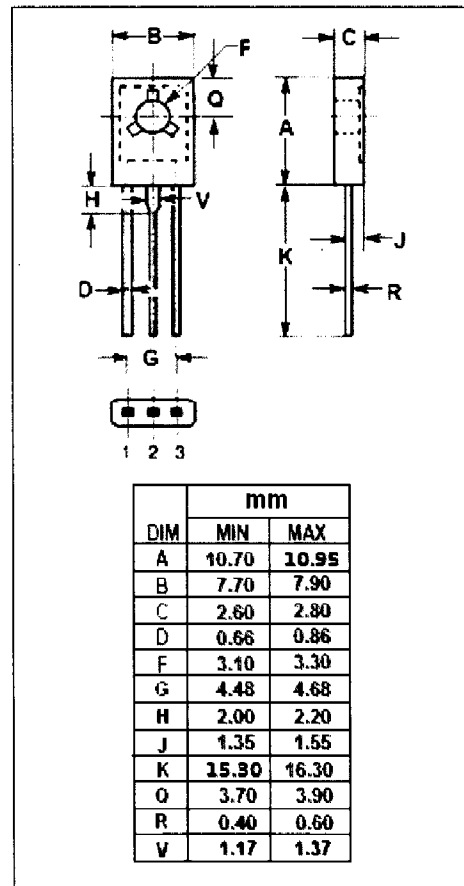
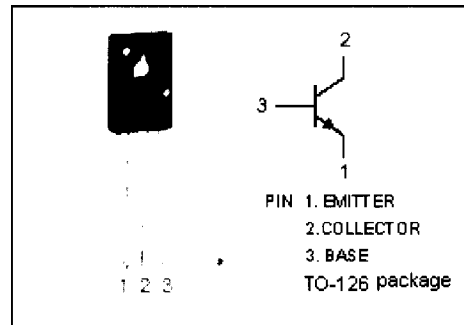
- High Collector Current  $I_C = 2.5A$
- Collector-Emitter Breakdown Voltage:  
 $V_{(BR)CEO} = 35V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Low Collector Saturation Voltage
- Complement to Type 2SA715

**APPLICATIONS**

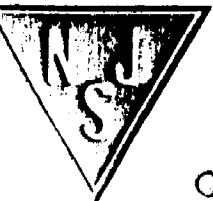
- Designed for low frequency power amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	35	V
$V_{CEO}$	Collector-Emitter Voltage	35	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	2.5	A
$I_{CM}$	Collector Current-Peak	3	A
$P_C$	Collector Power Dissipation @ $T_C = 25^\circ C$	10	W
	Collector Power Dissipation @ $T_a = 25^\circ C$	0.75	
$T_J$	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
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C=1\text{mA}; I_E=0$	35			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=10\text{mA}; R_{BE}=\infty$	35			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=1\text{mA}; I_C=0$	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=2\text{A}; I_B=0.2\text{A}$			1.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C=1.5\text{A}; V_{CE}=2\text{V}$			1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=35\text{V}; I_E=0$		*	20	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C=0.5\text{A}; V_{CE}=2\text{V}$	60		320	
$h_{FE-2}$	DC Current Gain	$I_C=1.5\text{A}; V_{CE}=2\text{V}$	20			
$f_T$	Current-Gain—Bandwidth Product	$I_C=0.2\text{A}; V_{CE}=2\text{V}$		180		MHz

### ◆ $h_{FE-1}$ Classifications

B	C	D
60-120	100-200	160-320