

**isc Silicon PNP Power Transistor**

**2SA1516**

**DESCRIPTION**

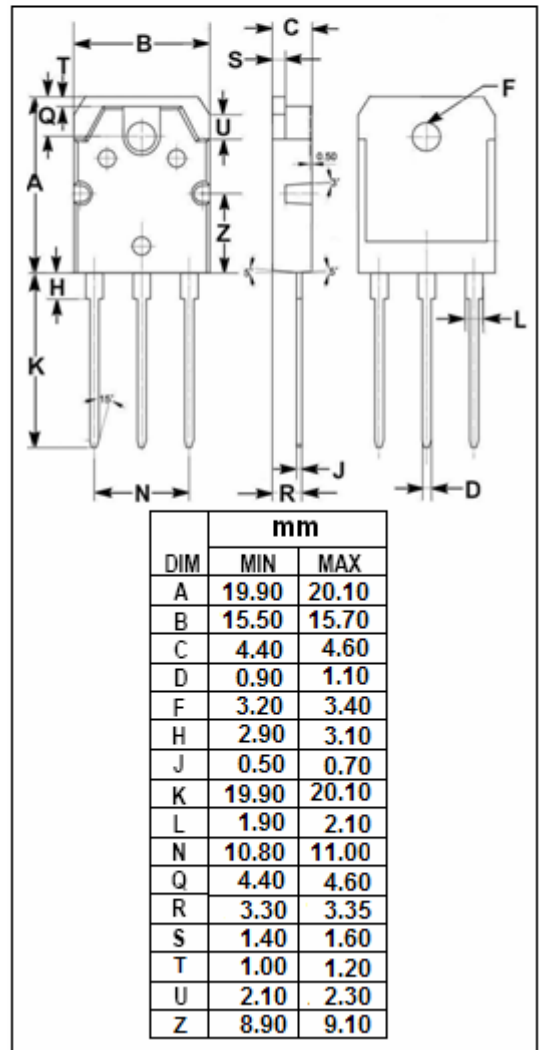
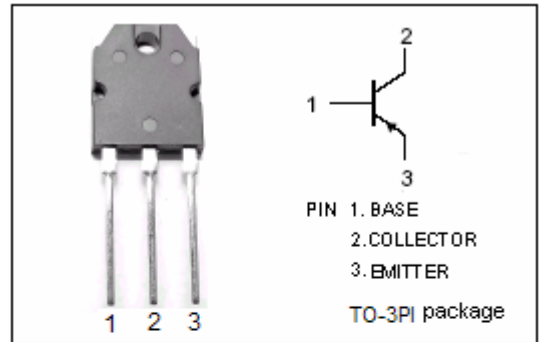
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -180V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Complement to Type 2SC3907

**APPLICATIONS**

- Power amplifier applications
- Recommend for 80W high fidelity audio frequency amplifier output stage applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-180	V
$V_{CEO}$	Collector-Emitter Voltage	-180	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-12	A
$I_B$	Base Current-Continuous	-1.2	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	130	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



**isc Silicon PNP Power Transistor****2SA1516****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	$I_C = -50\text{mA}$ ; $I_B = 0$	-180			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -8\text{A}$ ; $I_B = -0.8\text{A}$			-3.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -7\text{A}$ ; $V_{CE} = -5\text{V}$			-1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -180\text{V}$ ; $I_E = 0$			-5	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -5\text{V}$ ; $I_C = 0$			-5	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C = -1\text{A}$ ; $V_{CE} = -5\text{V}$	55		180	
$h_{FE-2}$	DC Current Gain	$I_C = -7\text{A}$ ; $V_{CE} = -5\text{V}$	35			
$C_{OB}$	Output Capacitance	$I_E = 0$ ; $V_{CB} = -10\text{V}$ ; $f_{test} = 1.0\text{MHz}$		470		pF
$f_T$	Current-Gain—Bandwidth Product	$I_C = -1\text{A}$ ; $V_{CE} = -5\text{V}$		25		MHz

◆  **$h_{FE-1}$  Classifications**

R	O
55-110	90-180