

**SPTECH Silicon PNP Power Transistor**

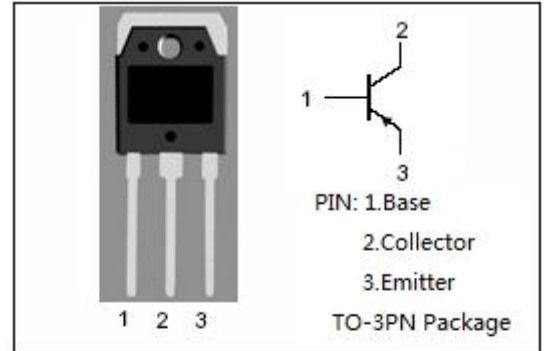
**2SA1492**

**DESCRIPTION**

- High Collector-Emitter Breakdown Voltage-  
 $V_{(BR)CEO} = -180V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Complement to Type 2SC3856

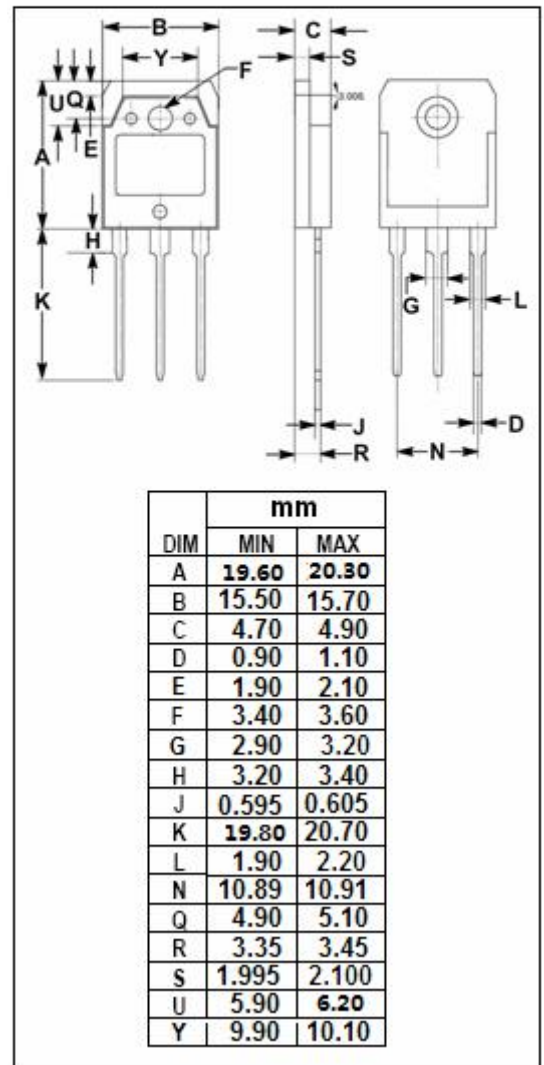
**APPLICATIONS**

- For audio and general purpose 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	-6	V
$I_C$	Collector Current-Continuous	-15	A
$I_B$	Base Current-Continuous	-4	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	$^\circ\text{C}$



**ELECTRICAL CHARACTERISTICS**

T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -50mA ; I <sub>B</sub> = 0	-180			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -5.0A; I <sub>B</sub> = -0.5A			-2.0	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -180V ; I <sub>E</sub> =0			-100	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -6V; I <sub>C</sub> =0			-100	μ A
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -3A ; V <sub>CE</sub> = -4V	50		180	
C <sub>OB</sub>	Output Capacitance	I <sub>E</sub> = 0 ; V <sub>CB</sub> = -10V;f= 1.0MHz		500		pF
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>E</sub> = 0.5A ; V <sub>CE</sub> = -12V		20		MHz

Switching times

t <sub>on</sub>	Turn-on Time	I <sub>C</sub> = -10A ,R <sub>L</sub> = 4 Ω , I <sub>B1</sub> = -I <sub>B2</sub> = -1A,V <sub>CC</sub> = -40V		0.6		μ s
t <sub>stg</sub>	Storage Time			0.9		μ s
t <sub>f</sub>	Fall Time			0.2		μ s

◆ **h<sub>FE</sub> Classifications**

O	P	Y
50-80	80-130	130-180