

isc Silicon PNP Power Transistors

2SA1220/A

DESCRIPTION

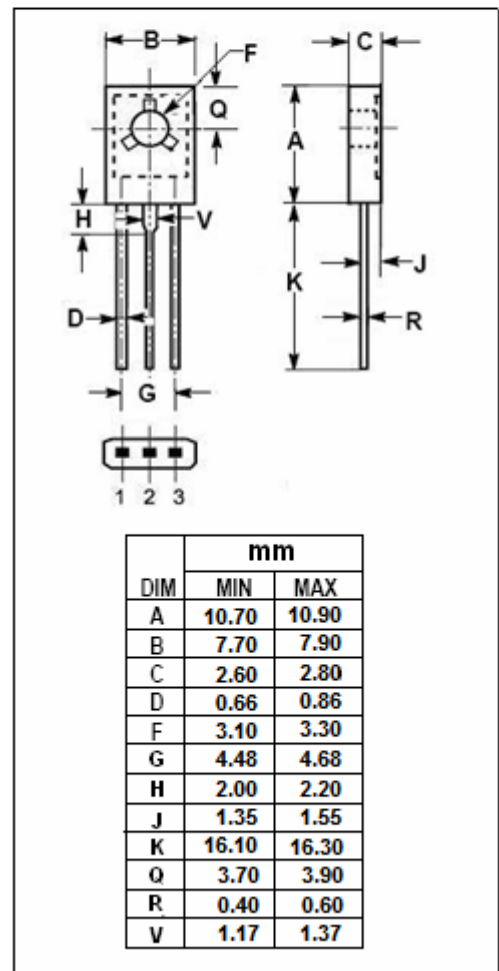
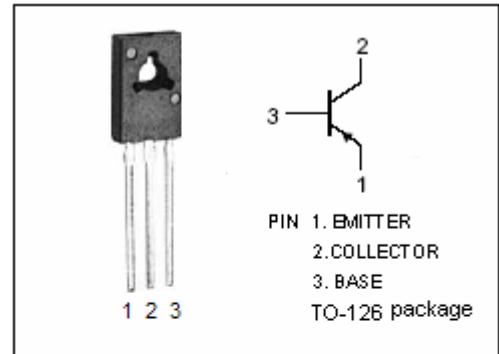
- Good Linearity of  $h_{FE}$
- High Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -120V(\text{Min})-2SA1220$   
=  $-160V(\text{Min})-2SA1220A$
- Complement to Type 2SC2690/A

APPLICATIONS

- Audio frequency power amplifier
- High frequency power amplifier

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

SYMBOL	PARAMETER	VALUE	UNIT	
$V_{CBO}$	Collector-Base Voltage	2SA1220	-120	V
		2SA1220A	-160	
$V_{CEO}$	Collector-Emitter Voltage	2SA1220	-120	V
		2SA1220A	-160	
$V_{EBO}$	Emitter-Base Voltage	-5	V	
$I_C$	Collector Current-Continuous	-1.2	A	
$I_{CM}$	Collector Current-Peak	-2.5	A	
$I_B$	Base Current-Continuous	-0.3	A	
$P_C$	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	1.2	W	
	Total Power Dissipation @ $T_C=25^\circ\text{C}$	20		
$T_J$	Junction Temperature	150	$^\circ\text{C}$	
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$	



## isc Silicon PNP Power Transistors

## 2SA1220/A

## ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -1A; I <sub>B</sub> = -0.2A			-0.7	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = -1A; I <sub>B</sub> = -0.2A			-1.3	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -120V; I <sub>E</sub> = 0			-1.0	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -3V; I <sub>C</sub> =0			-1.0	μ A
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -5mA ; V <sub>CE</sub> = -5V	35			
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -0.3A ; V <sub>CE</sub> = -5V	60		320	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = -0.2A ; V <sub>CE</sub> = -5V		175		MHz
C <sub>OB</sub>	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = -10V; f <sub>test</sub> = 1.0MHz		26		pF

◆ h<sub>FE-2</sub> Classifications

R	Q	P
60-120	100-200	160-320