

**isc Silicon PNP Power Transistors**
**2SA1220/A**
**DESCRIPTION**

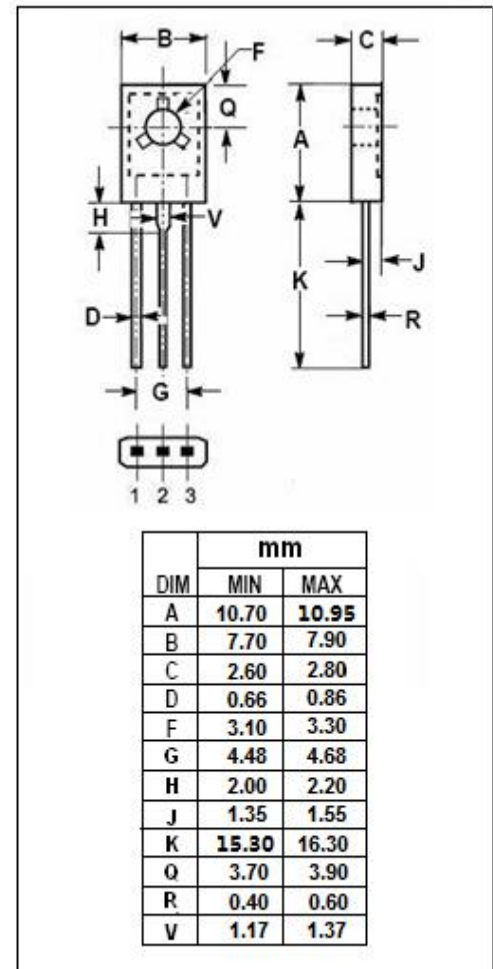
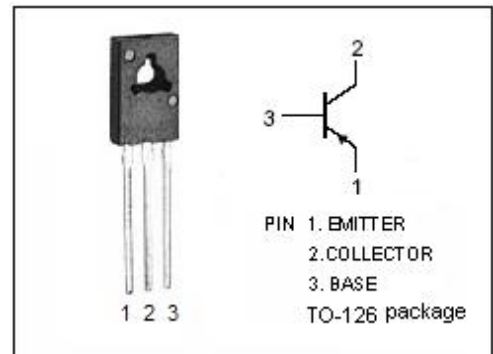
- Good Linearity of  $h_{FE}$
- High Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -120V(\text{Min})$ -2SA1220  
=  $-160V(\text{Min})$ -2SA1220A
- Complement to Type 2SC2690/A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Audio frequency power amplifier
- High frequency power amplifier

**ABSOLUTE MAXIMUM RATINGS(Ta=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>CBO</sub>	Collector-Base Voltage	2SA1220	-120	V
		2SA1220A	-160	
V <sub>CEO</sub>	Collector-Emitter Voltage	2SA1220	-120	V
		2SA1220A	-160	
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V	
I <sub>C</sub>	Collector Current-Continuous	-1.2	A	
I <sub>CM</sub>	Collector Current-Peak	-2.5	A	
I <sub>B</sub>	Base Current-Continuous	-0.3	A	
P <sub>C</sub>	Collector Power Dissipation @ T <sub>a</sub> =25°C	1.2	W	
	Total Power Dissipation @ T <sub>C</sub> =25°C	20		
T <sub>J</sub>	Junction Temperature	150	°C	
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C	



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**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

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