

# isc Silicon PNP Power Transistor

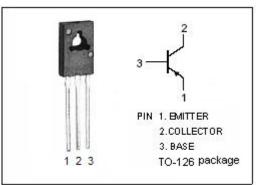
# **KSA1142**

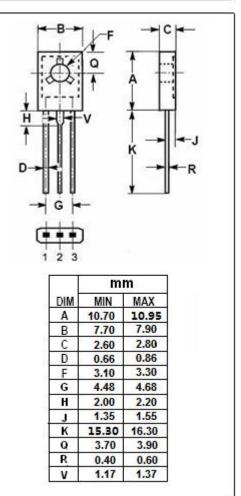
## DESCRIPTION

- Low Collector Saturation Voltage
- High voltage,f<sub>T</sub>
- Complement to Type 2SC2682
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## **APPLICATIONS**

• Designed for audio frequency power amplifiers





## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	-180	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-180	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
lc	Collector Current-Continuous	-100	mA
Pc	Total Power Dissipation @ Ta=25℃	1.2	w
	Total Power Dissipation @ T <sub>c</sub> =25℃	10	W
TJ	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℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -50mA; I <sub>B</sub> = -5mA			-0.5	V
V <sub>BE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -50mA; I <sub>B</sub> = -5mA			-1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -180V; I <sub>E</sub> = 0			-1	μA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -3V; I <sub>C</sub> = 0			-1	μA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -1mA ; V <sub>CE</sub> = -5V	90			
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -10mA ; V <sub>CE</sub> = -5V	100		320	
fT	Current-Gain—Bandwidth Product	Ic= -20mA; Vce= -10V		180		MHz

### h<sub>FE-2</sub> Classifications

O P 100-200 160-320

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