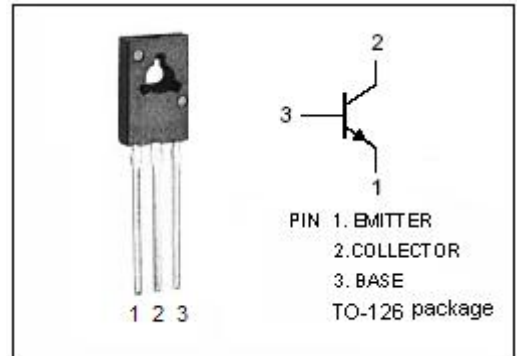


**isc Silicon NPN Power Transistor**
**KSC2682**
**DESCRIPTION**

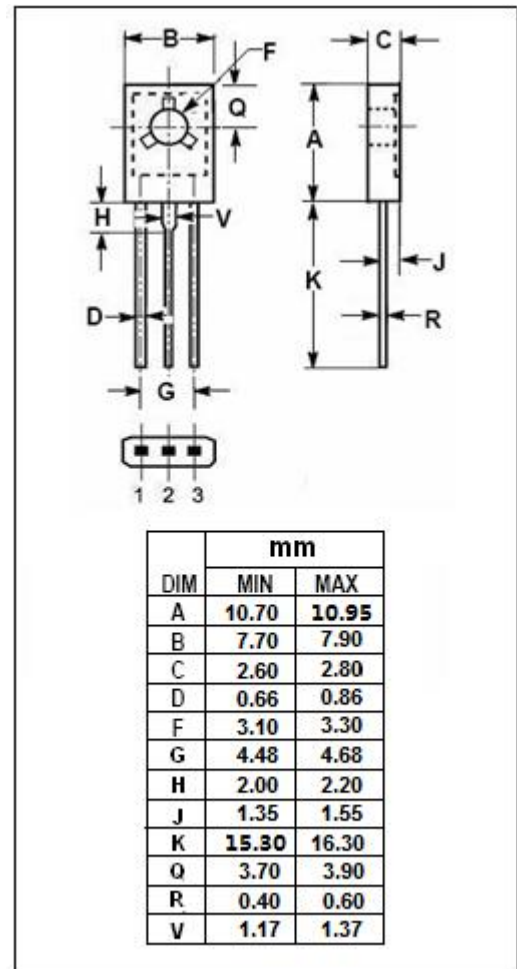
- High voltage
- Low Saturation Voltage
- Complementary to KSA1142 PNP transistor
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- The KSC2682 is designed for use in audio frequency power amplifier


**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	180	V
V <sub>CER</sub>	Collector-Emitter Voltage R <sub>BE</sub> =150 Ω	180	V
V <sub>CEO</sub>	Collector-Emitter Voltage	180	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current-Continuous	0.1	A
P <sub>C</sub>	Collector Power Dissipation @ T <sub>c</sub> =25°C	8	W
T <sub>J</sub>	Junction Temperature	-55~150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C



**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> =50mA; I <sub>B</sub> = 5mA			0.5	V
V <sub>BE(sat)</sub>	Base-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	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 3V; I <sub>C</sub> = 0			1	μ A
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	
NF	Noise figure	I <sub>C</sub> = 1mA ; V <sub>CE</sub> = 10V; RG=10KΩ,F=1KHz	4			dB

**◆ h<sub>FE-2</sub> Classifications**

O	Y
100-200	160-320

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