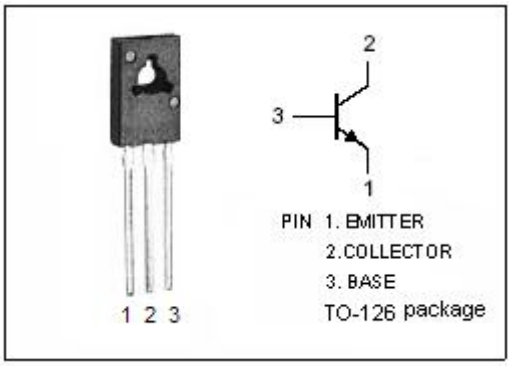
isc Silicon NPN Power Transistor 2SC2682

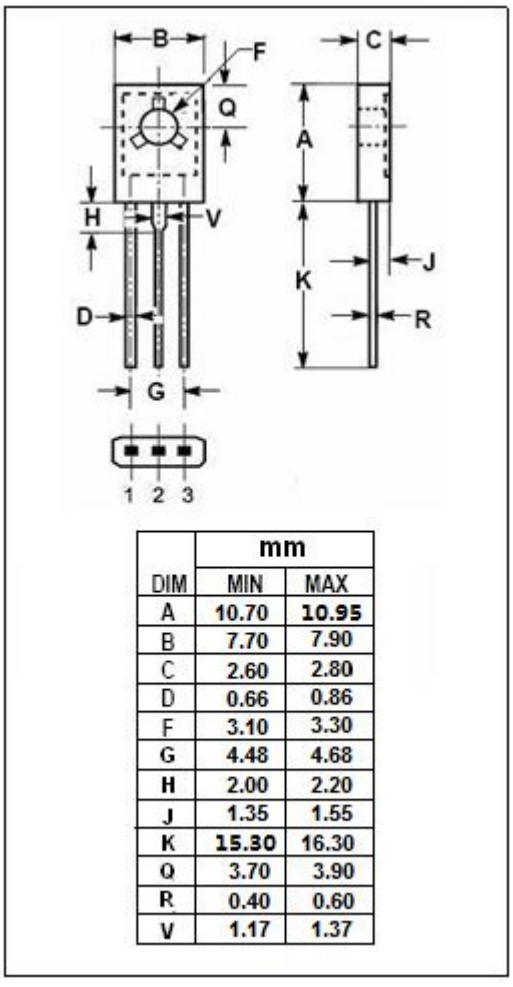
DESCRIPTION

- High voltage
- Low Saturation Voltage
- Complementary to 2SA1142 PNP transistor
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- The 2SC2682 is designed for use in audio frequency power amplifier



DIM	mm MIN	MAX
A	10.70	10.95
B	7.70	7.90
C	2.60	2.80
D	0.66	0.86
F	3.10	3.30
G	4.48	4.68
H	2.00	2.20
J	1.35	1.55
K	15.30	16.30
Q	3.70	3.90
R	0.40	0.60
V	1.17	1.37

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	180	V
V_{CER}	Collector-Emitter Voltage R_{BE}=150 Ω	180	V
V_{CEO}	Collector-Emitter Voltage	180	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	0.1	A
P_C	Collector Power Dissipation @ Tc=25℃	10	W
T_J	Junction Temperature	-55~150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C=50mA; I_B= 5mA			0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C=50mA; I_B= 5mA			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 180V ; I_E= 0			1	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			1	μA
h_{FE-1}	DC Current Gain	I_C= 1mA ; V_{CE}= 10V	90			
h_{FE-2}	DC Current Gain	I_C= 10mA ; V_{CE}= 10V	100		320	
NF	Noise figure	I_C= 1mA ; V_{CE}= 10V; RG=10KΩ,F=1KHz	4			dB

◆ **h_{FE-2} Classifications**

Q	P
100-200	160-320