

isc Silicon PNP Power Transistor
2SA1142
DESCRIPTION

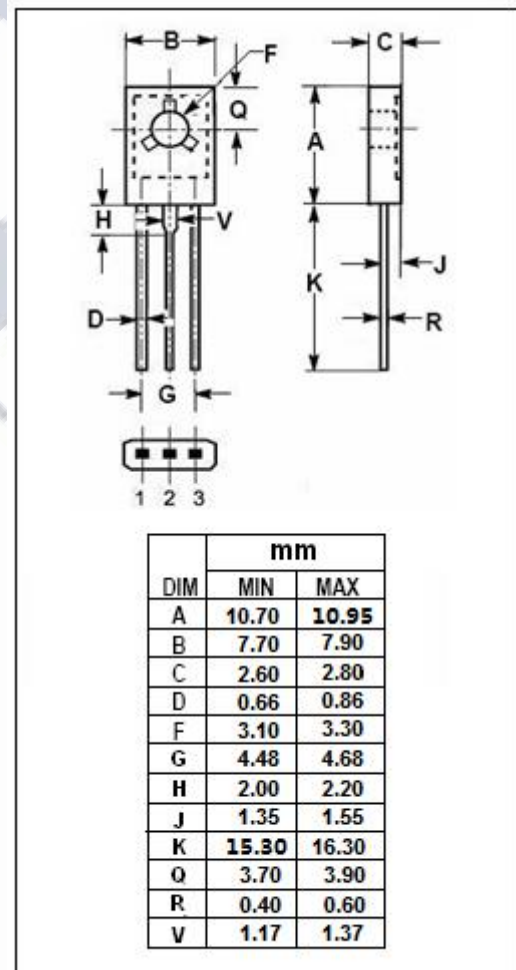
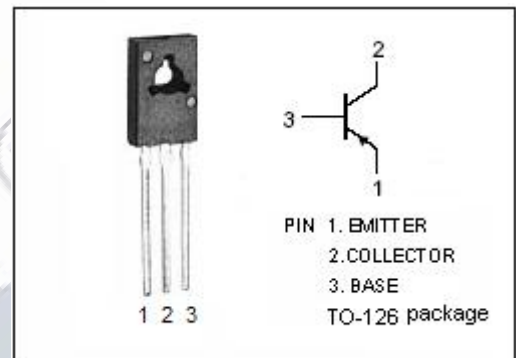
- Low Collector Saturation Voltage
- High voltage, f_r
- Complement to Type 2SC2682
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for audio frequency power amplifiers

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-180	V
V_{CEO}	Collector-Emitter Voltage	-180	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-100	mA
P_C	Total Power Dissipation @ $T_a=25^\circ\text{C}$	1.2	w
	Total Power Dissipation @ $T_c=25^\circ\text{C}$	10	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor**2SA1142****ELECTRICAL CHARACTERISTICS****T_c=25°C 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)}	Collector-Emitter Saturation Voltage	I _C = -50mA; I _B = -5mA			-1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -180V; I _E = 0			-1	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -3V; I _C = 0			-1	μ A
h _{FE-1}	DC Current Gain	I _C = -1mA; V _{CE} = -5V	90			
h _{FE-2}	DC Current Gain	I _C = -10mA; V _{CE} = -5V	100		320	
f _T	Current-Gain—Bandwidth Product	I _C = -20mA; V _{CE} = -10V		180		MHz

◆ **h_{FE-2} Classifications**

O	P
100-200	160-320

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