

**isc Silicon PNP Power Transistor**
**2SA1145**
**DESCRIPTION**

- Low collector output capacitance
- High frequency
- Complement to 2SC2705
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

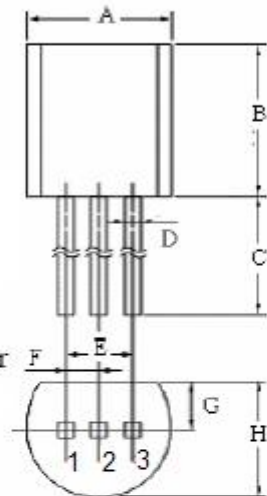
**APPLICATIONS**

- Audio frequency amplifier application

**ABSOLUTE MAXIMUM RATINGS(Ta=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-150	V
$V_{CEO}$	Collector-Emitter Voltage	-150	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-50	mA
$P_C$	Total Power Dissipation @ $T_C=25^\circ\text{C}$	0.8	W
$T_J$	Junction Temperature	150	°C
$T_{stg}$	Storage Temperature Range	-55~150	°C

TO-92L package



DIM	mm	
	MIN	MAX
A	4.80	5.20
B	7.80	8.20
C	13.0	14.0
D	0.35	0.55
E	2.54	
F	1.27	
G	1.30	1.50
H	3.80	4.20

## isc Silicon PNP Power Transistor

2SA1145

## ELECTRICAL CHARACTERISTICS

T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -1mA; I <sub>B</sub> = 0	-150			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -10mA; I <sub>B</sub> = -1mA			-1	V
V <sub>BE(on)</sub>	Base-Emitter Voltage	I <sub>C</sub> = -10mA; V <sub>CE</sub> = -5V			-0.8	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -150V; I <sub>E</sub> = 0			-0.1	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V; I <sub>C</sub> = 0			-0.1	μ A
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -10mA; V <sub>CE</sub> = -5V	80		240	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = -10mA; V <sub>CE</sub> = -10V		200		MHz
C <sub>OB</sub>	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = -10V; f= 1MHz		2.5		pF

◆ h<sub>FE</sub> Classifications

O	Y
80-160	120-240

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