

**isc Silicon PNP Power Transistor**
**2SA985**
**DESCRIPTION**

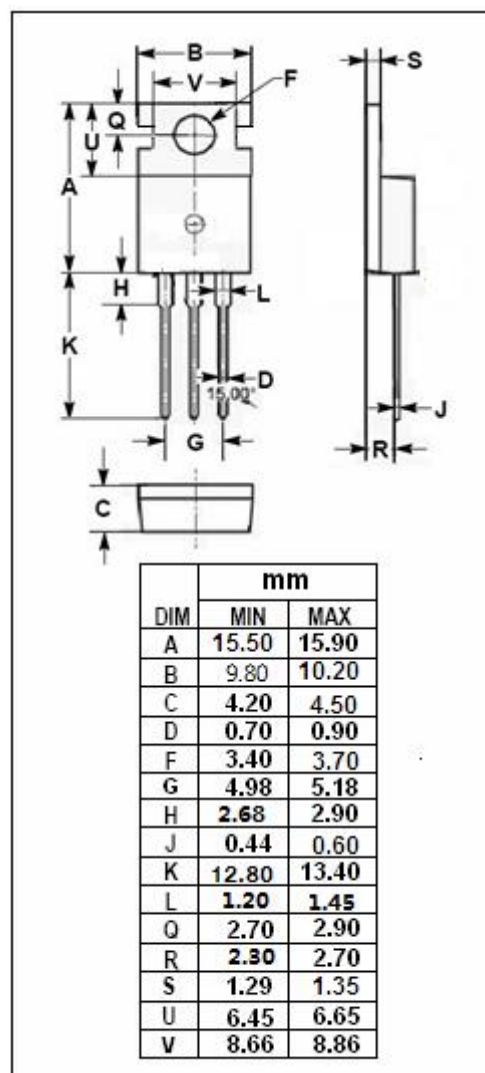
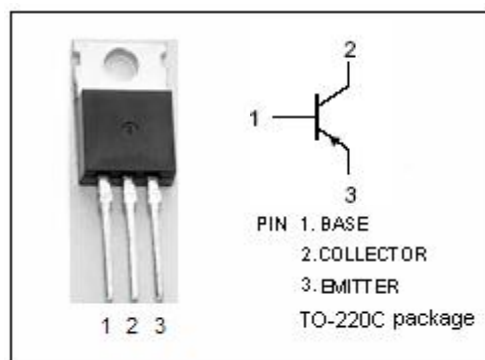
- Collector-Emitter Breakdown Voltage  
:  $V_{(BR)CEO} = -120V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Complement to Type 2SC2275
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Audio frequency power amplifier applications
- High frequency power amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-120	V
$V_{CEO}$	Collector-Emitter Voltage	-120	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-1.5	A
$I_{CM}$	Collector Current-Peak	-3.0	A
$I_B$	Base Current-Continuous	-0.3	A
$P_C$	Total Power Dissipation @ $T_a=25^\circ\text{C}$	1.5	W
	Total Power Dissipation @ $T_c=25^\circ\text{C}$	25	
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



**isc Silicon PNP Power Transistor****2SA985****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> = -1A; I <sub>B</sub> = -0.1A			-2.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = -1A; I <sub>B</sub> = -0.1A			-1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -120V; I <sub>E</sub> = 0			-1.0	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -3V; I <sub>C</sub> = 0			-1.0	μ A
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -5mA; V <sub>CE</sub> = -5V	35			
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -0.3A; V <sub>CE</sub> = -5V	60		320	
C <sub>OB</sub>	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = -10V; f <sub>test</sub> = 1MHz		29		pF
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = -0.2A; V <sub>CE</sub> = -5V		180		MHz

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

R	Q	P
60-120	100-200	160-320

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