

isc Silicon PNP Power Transistor

2SA1006A

DESCRIPTION

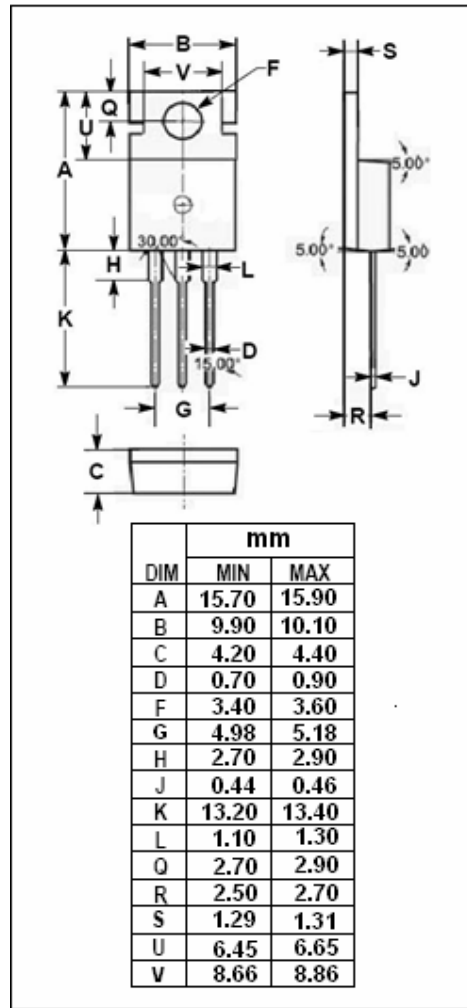
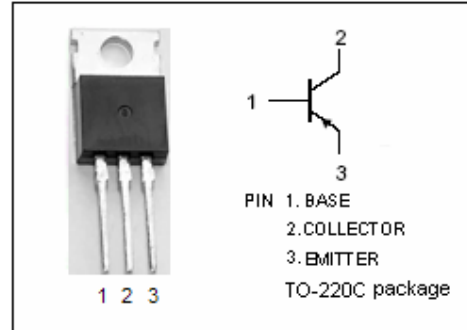
- Good Linearity of h_{FE}
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -200V(\text{Min})$
- Wide Area of Safe Operation
- Complement to Type 2SC2336A

APPLICATIONS

- A audio frequency power amplifier
- High frequency power amplifier

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-200	V
V_{CEO}	Collector-Emitter Voltage	-200	V
V_{EBO}	Emitter-Base Voltage	-5.0	V
I_C	Collector Current-Continuous	-1.5	A
I_{CM}	Collector Current-Peak	-3.0	A
P_C	Collector 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**2SA1006A****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -500\text{mA}; I_B = -50\text{mA}$			-1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -500\text{mA}; I_B = -50\text{mA}$			-1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -150\text{V}; I_E = 0$			-1.0	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -3.0\text{V}; I_C = 0$			-1.0	μA
h_{FE-1}	DC Current Gain	$I_C = -5\text{mA}; V_{CE} = -5\text{V}$	30			
h_{FE-2}	DC Current Gain	$I_C = -150\text{mA}; V_{CE} = -5\text{V}$	60		320	
f_T	Current-Gain—Bandwidth Product	$I_C = -100\text{mA}; V_{CE} = -10\text{V}$		80		MHz
C_{OB}	Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f = 1.0\text{MHz}$		45		pF

◆ **h_{FE-2} Classifications**

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