

isc Silicon PNP Power Transistor
2SA1105
DESCRIPTION

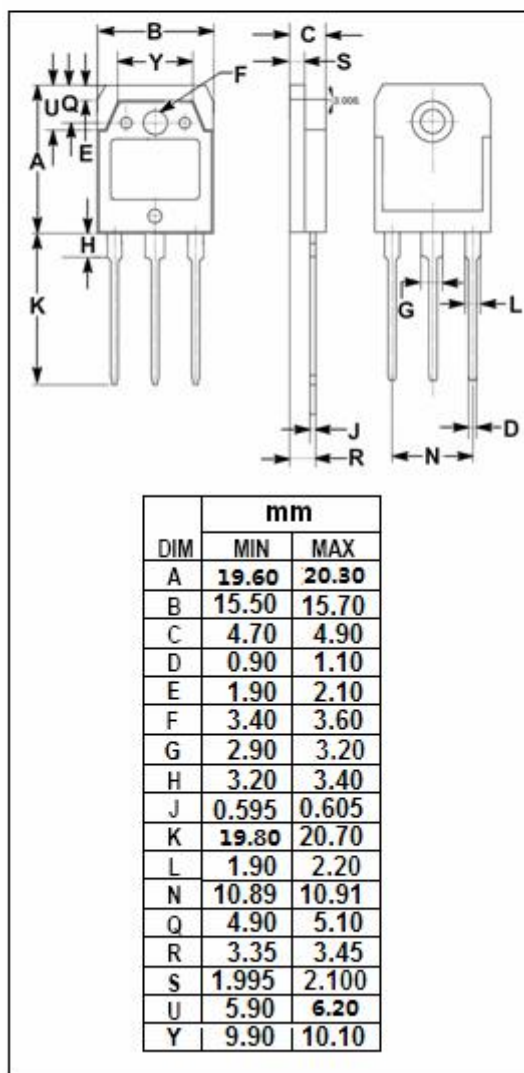
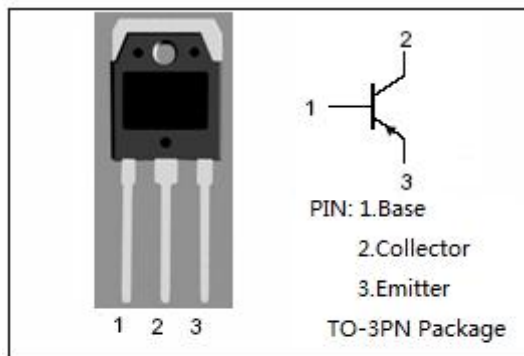
- Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = -120V(\text{Min})$
- Good Linearity of h_{FE}
- High Power Dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for audio 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	-6	V
I_C	Collector Current-Continuous	-9	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	90	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

 T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -50mA; I _B = 0	-120			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -5A; I _B = -0.5A			-2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -120V; I _E = 0			-10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -6V; I _C = 0			-10	μ A
h _{FE}	DC Current Gain	I _C = -3A; V _{CE} = -4V	50		180	
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f= 1.0MHz		400		pF
f _T	Current-Gain—Bandwidth Product	I _E = 0.5A; V _{CE} = -12V		20		MHz

◆ h_{FE} Classifications

O	P	Y
50-100	70-140	90-180

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