

isc Silicon PNP Power Transistor
2SB705
DESCRIPTION

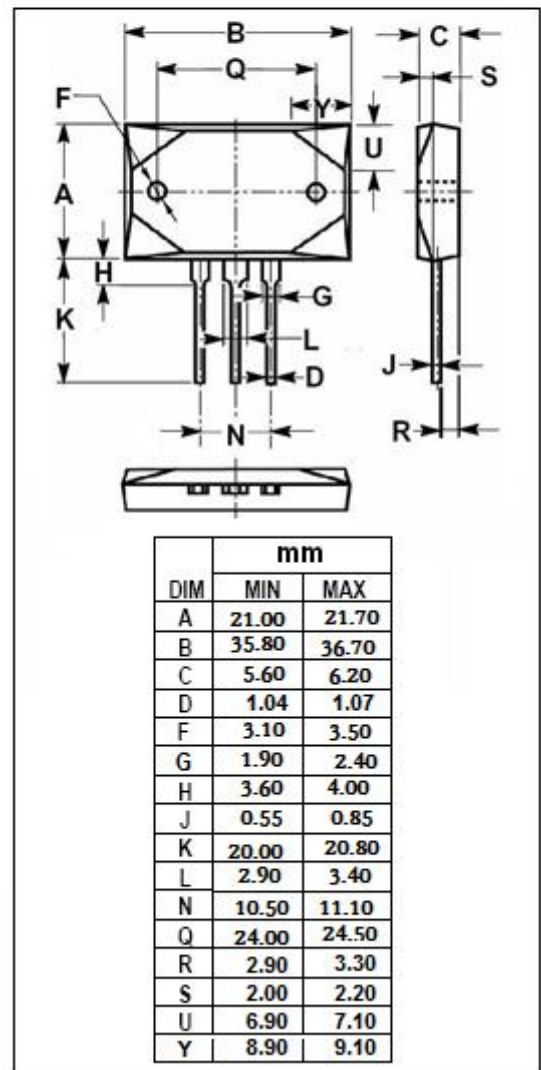
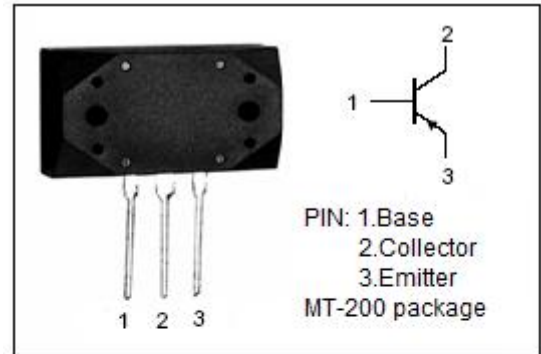
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -140V(\text{Min})$
- Complement to Type 2SD745
- High Power Dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For audio frequency power amplifier applications
- Suitable for output stages of 60~120 watts audio amplifier and voltage regulations.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-140	V
V_{CEO}	Collector-Emitter Voltage	-140	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-10	A
I_{CM}	Collector Current-Peak	-15	A
P_C	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	120	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 _{CE(sat)}	Collector-Emitter Saturation Voltage	I _c = -5A; I _B = -0.5A			-1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _c = -5A; I _B = -0.5A			-2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -140V; I _E = 0			-50	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -3V; I _C = 0			-50	μ A
h _{FE-1}	DC Current Gain	I _C = -50mA; V _{CE} = -5V	20			
h _{FE-2}	DC Current Gain	I _C = -2A; V _{CE} = -5V	40		200	
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f _{test} = 1.0MHz		430		pF
f _T	Current-Gain—Bandwidth Product	I _C = -0.2A; V _{CE} = -5V		17		MHz

◆ h_{FE-2} Classifications

S	R	Q
40-80	60-120	100-200

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