

isc Silicon PNP Power Transistor

2SB705

DESCRIPTION

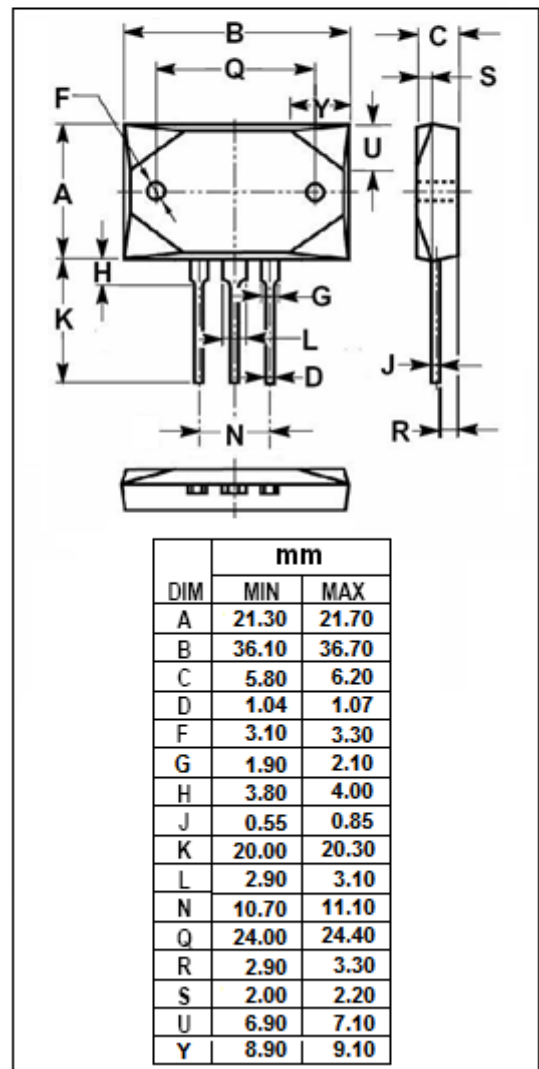
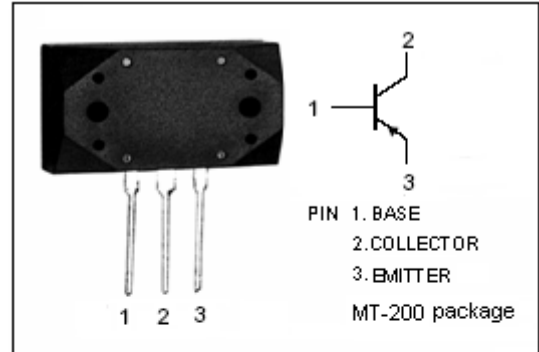
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -140V(\text{Min})$
- Complement to Type 2SD745
- High Power Dissipation

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	$^\circ\text{C}$



isc Website:

isc Silicon PNP Power Transistor**2SB705****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	$I_C = -5A; I_B = -0.5A$			-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	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -3V; I_C = 0$			-50	μA
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