

isc Silicon PNP Power Transistor

2SB705

DESCRIPTION

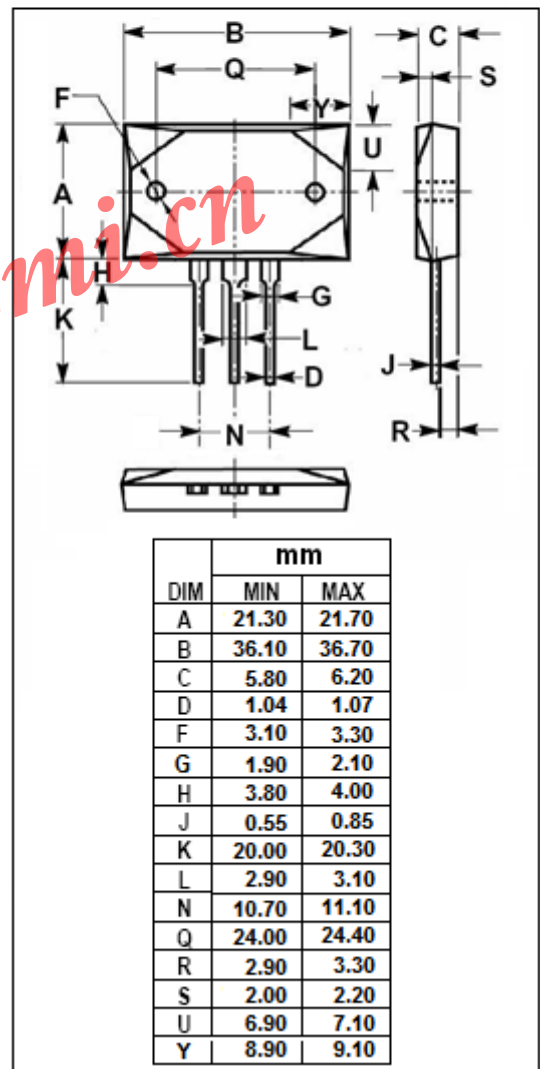
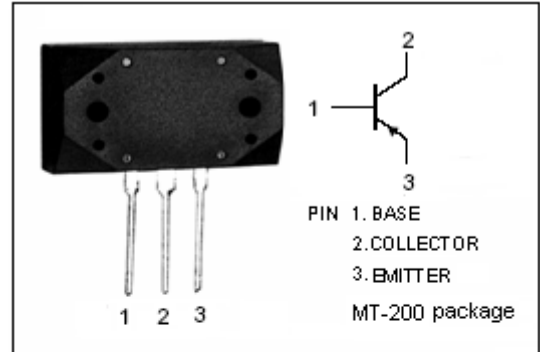
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -140V(\text{Min})$
- Complement to Type 2SD745
- High Power Dissipation

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 Silicon PNP Power Transistor

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## 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	$\mu A$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -3V; I_C = 0$			-50	$\mu A$
$h_{FE-1}$	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