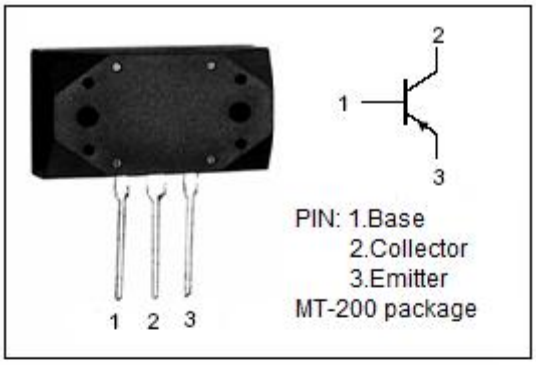
isc Silicon PNP Power Transistor — 2SB705B



DESCRIPTION

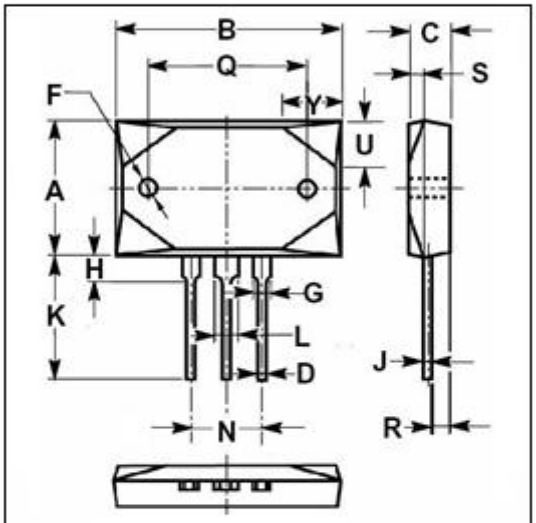
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= -160V(Min)
- Complement to Type 2SD745B
- High Power Dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

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

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-160	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℃	120	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	mm MAX
A	21.00	21.70
B	35.80	36.70
C	5.60	6.20
D	1.04	1.07
F	3.10	3.50
G	1.90	2.40
H	3.60	4.00
J	0.55	0.85
K	20.00	20.80
L	2.90	3.40
N	10.50	11.10
Q	24.00	24.50
R	2.90	3.30
S	2.00	2.20
U	6.90	7.10
Y	8.90	9.10

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ELECTRICAL CHARACTERISTICS

T_C=25℃ 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