

isc Silicon NPN Power Transistor

2SD845

DESCRIPTION

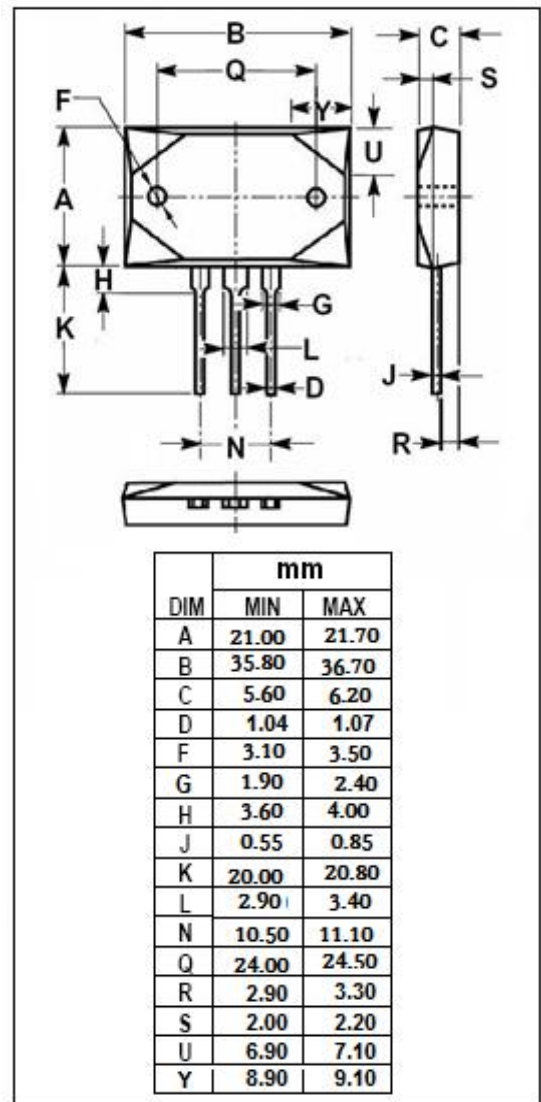
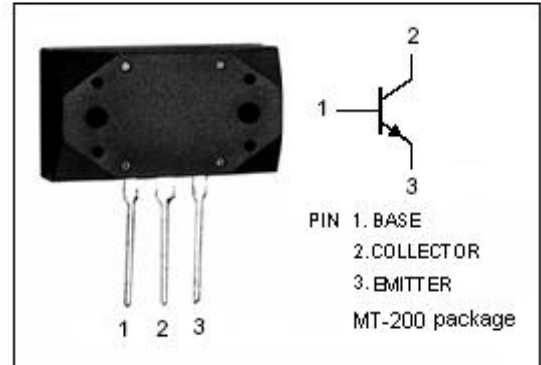
- Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = 150V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SB755
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for power amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	150	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	12	A
I_E	Emitter Current-Continuous	12	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 _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 10mA; I _B = 0	150			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA; I _C = 0	5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5A; I _B = 0.5A			2.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 5A; V _{CE} = 5V			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 150V; I _E = 0			50	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			50	μ A
h _{FE}	DC Current Gain	I _C = 1A; V _{CE} = 5V	55		160	
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} = 1.0MHz		200		pF
f _T	Current-Gain—Bandwidth Product	I _C = 1A; V _{CE} = 10V		20		MHz

◆ h_{FE} Classifications

R	O
55-110	80-160

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