

isc Silicon PNP Power Transistor

2SB754

DESCRIPTION

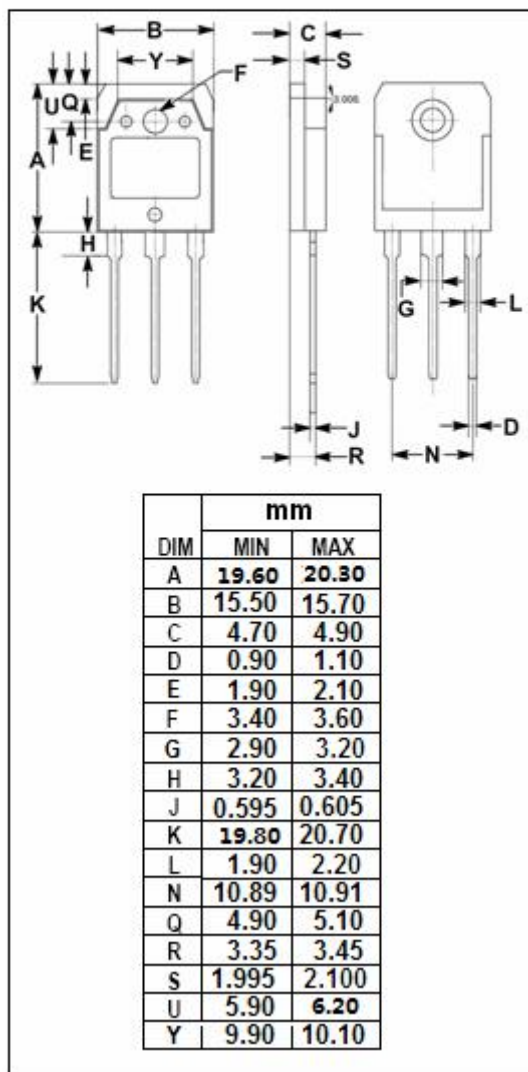
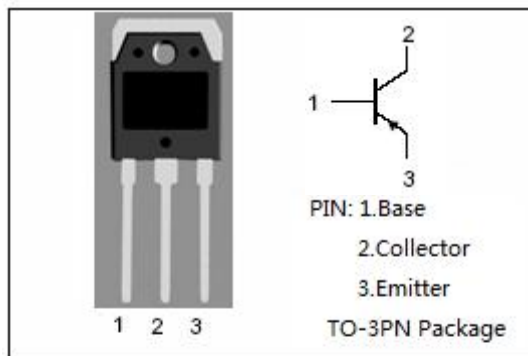
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -50V(\text{Min})$
- High Collector Current: $I_C = -7A$
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -0.4V(\text{Max}) @ I_C = -4A$
- Complement to Type 2SD844
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High current switching applications.
- Power amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-7	A
P_C	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	2.5	W
	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	60	
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)EBO}	Emitter-Base Breakdown Voltage	I _E = -10mA; I _C = 0	-5			V
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -50mA; I _B = 0	-50			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -4A; I _B = -0.4A			-0.4	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -4A; V _{CE} = -1V			-1.2	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -50V; I _E = 0			-10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-10	μ A
h _{FE-1}	DC Current Gain	I _C = -1A; V _{CE} = -1V	70		240	
h _{FE-2}	DC Current Gain	I _C = -4A; V _{CE} = -1V	30			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f _{test} = 1.0MHz		300		pF
f _T	Current-Gain—Bandwidth Product	I _C =-1A; V _{CE} = -5V		10		MHz

◆ h_{FE-1}Classifications

O	Y
70-140	120-240

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