

Silicon PNP Power Transistor

2SB1054

DESCRIPTION

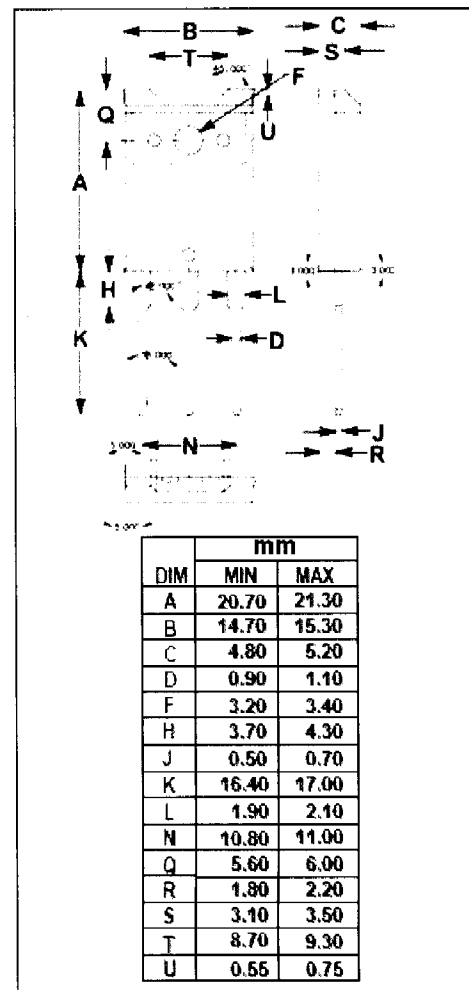
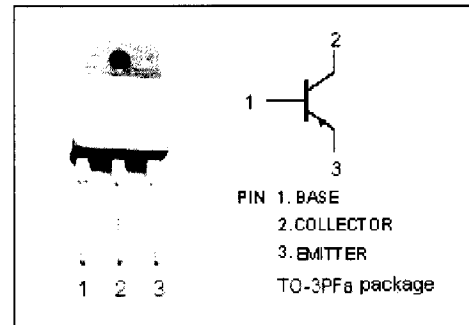
- Low Collector Saturation Voltage-
 : $V_{CE(sat)} = -2.0V(\text{Max})@I_C = -3A$
- Wide Area of Safe Operation
- Complement to Type 2SD1485

APPLICATIONS

- Designed for high power amplification.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-5	A
I_{CM}	Collector Current-Peak	-8	A
P_C	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	3	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

$T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -3A; I_B = -0.3A$			-2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -3A; V_{CE} = -5V$			-1.8	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -100V; I_E = 0$			-50	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -3V; I_C = 0$			-50	μA
h_{FE-1}	DC Current Gain	$I_C = -20\text{mA}; V_{CE} = -5V$	20			
h_{FE-2}	DC Current Gain	$I_C = -1A; V_{CE} = -5V$	60		200	
h_{FE-3}	DC Current Gain	$I_C = -3A; V_{CE} = -5V$	20			
C_{OB}	Output Capacitance	$I_E = 0; V_{CE} = -10V; f_{test} = 1\text{MHz}$		170		pF
f_T	Current-Gain—Bandwidth Product	$I_C = -0.5A; V_{CE} = -5V; f_{test} = 1\text{MHz}$		20		MHz

◆ h_{FE-2} Classifications

Q	P
60-120	100-200