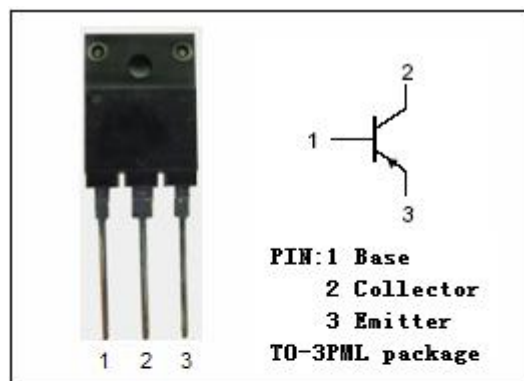


isc Silicon PNP Power Transistor

2SB1154

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -80V(\text{Min})$
- Good Linearity of h_{FE}
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -0.5V(\text{Max.}) @ I_C = -6A$
- Complement to Type 2SD1705
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

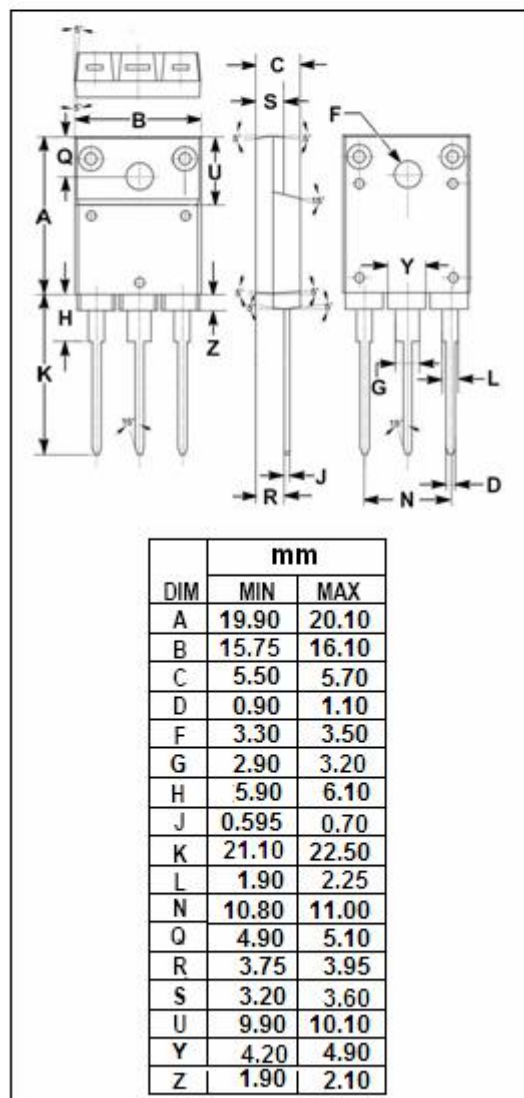


APPLICATIONS

- Designed for power switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-130	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-10	A
I_{CP}	Collector Current-Pulse	-20	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	70	W
	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	3	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor**2SB1154****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}; I_B = 0$	-80			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C = -6\text{A}; I_B = -0.3\text{A}$			-0.5	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C = -10\text{A}; I_B = -1\text{A}$			-1.5	V
$V_{BE(sat)-1}$	Base -Emitter Saturation Voltage	$I_C = -6\text{A}; I_B = -0.3\text{A}$			-1.5	V
$V_{BE(sat)-2}$	Base -Emitter Saturation Voltage	$I_C = -10\text{A}; I_B = -1\text{A}$			-2.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -100\text{V}; I_E = 0$			-10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -5\text{V}; I_C = 0$			-50	μA
h_{FE-1}	DC Current Gain	$I_C = -0.1\text{A}; V_{CE} = -2\text{V}$	45			
h_{FE-2}	DC Current Gain	$I_C = -3\text{A}; V_{CE} = -2\text{V}$	90		260	
h_{FE-3}	DC Current Gain	$I_C = -6\text{A}; V_{CE} = -2\text{V}$	30			

◆ **h_{FE-2} Classifications**

Q	P
90-180	130-260

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