

isc Silicon PNP Power Transistor

2SB1419

DESCRIPTION

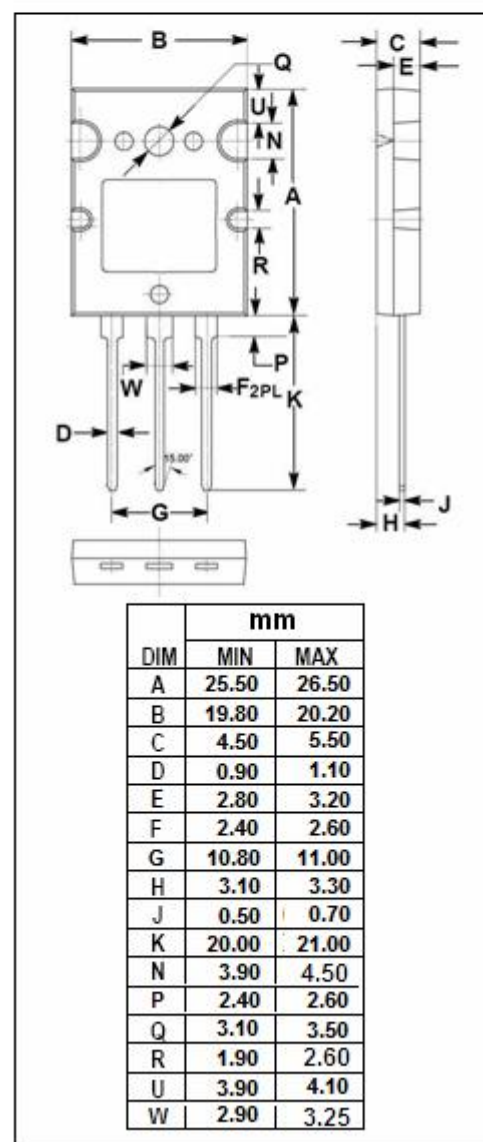
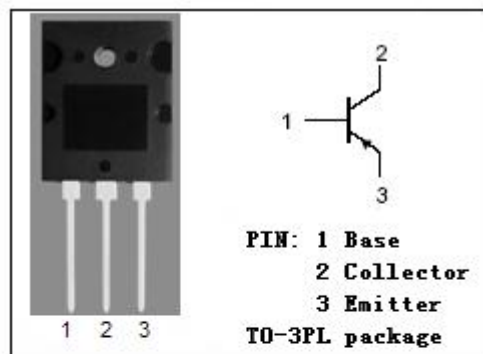
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -160V(\text{Min})$
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Power amplifier applications
- Optimum for the output stage of a HiFi audio amplifier

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

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	-12	A
I_{CM}	Collector Current-Peak	-20	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	120	W
	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	3.5	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor**2SB1419****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	$I_C = -25\text{mA}$; $I_B = 0$	-160			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -8\text{A}$; $I_B = -0.8\text{A}$			-1.8	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -8\text{A}$; $V_{CE} = -5\text{V}$			-1.8	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -160\text{V}$; $I_E = 0$			-50	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -3\text{V}$; $I_C = 0$			-50	μA
h_{FE-1}	DC Current Gain	$I_C = -20\text{mA}$; $V_{CE} = -5\text{V}$	20			
h_{FE-2}	DC Current Gain	$I_C = -1\text{A}$; $V_{CE} = -5\text{V}$	60		200	
h_{FE-3}	DC Current Gain	$I_C = -8\text{A}$; $V_{CE} = -5\text{V}$	20			

◆ h_{FE-2} Classifications

Q	S	P
60-120	80-160	100-200

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