

# isc Silicon PNP Power Transistor

## 2SB1158

### DESCRIPTION

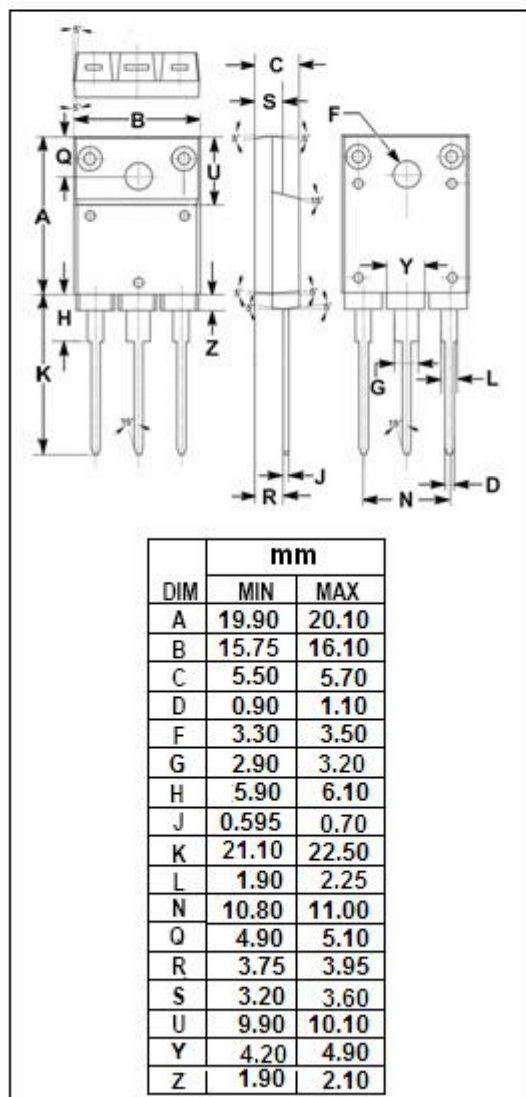
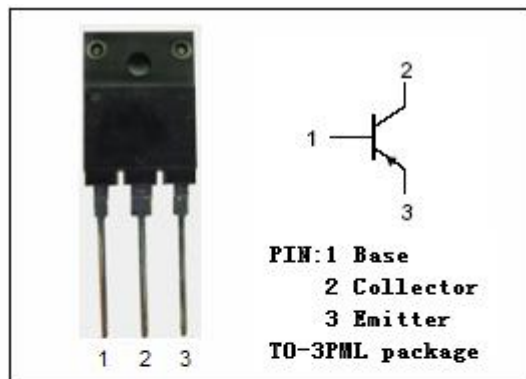
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -120V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Wide Area of Safe Operation
- Complement to Type 2SD1713
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

- Designed for high power amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-120	V
$V_{CEO}$	Collector-Emitter Voltage	-120	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-6	A
$I_{CP}$	Collector Current-Pulse	-10	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****2SB1158****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	$I_C = -4A$ ; $I_B = -0.4A$			-2.0	V
$V_{BE(on)}$	Base -Emitter On Voltage	$I_C = -4A$ ; $V_{CE} = -5V$			-1.8	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -120V$ ; $I_E = 0$			-50	$\mu A$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -3V$ ; $I_C = 0$			-50	$\mu A$
$h_{FE-1}$	DC Current Gain	$I_C = -20mA$ ; $V_{CE} = -5V$	20			
$h_{FE-2}$	DC Current Gain	$I_C = -1A$ ; $V_{CE} = -5V$	60		200	
$h_{FE-3}$	DC Current Gain	$I_C = -4A$ ; $V_{CE} = -5V$	20			

◆  **$h_{FE-2}$  Classifications**

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

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