

SPTECH Silicon NPN Darlington Power Transistor

BU180

DESCRIPTION

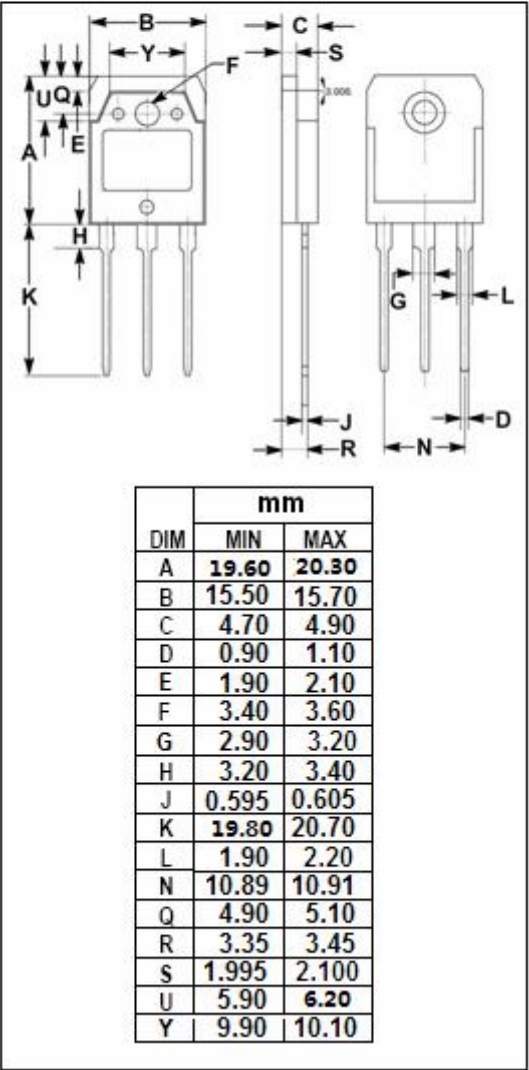
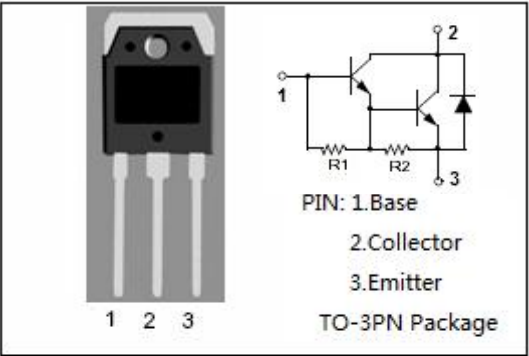
- Collector Current $I_C = 10A$
- DC Current Gain:
: $h_{FE} = 200(\text{Min}) @ I_C = 5A$
- Low Collector Saturation Voltage

APPLICATIONS

- Designed for line operated switchmode applications such as:
- Switching regulators
- Inverters
- Solenoid and relay drivers

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	320	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current-Continuous	10	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	50	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



SPTECH Silicon NPN Darlington Power Transistor**BU180****ELECTRICAL CHARACTERISTICS** **$T_C=25^{\circ}\text{C}$ unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C = 50\text{mA}; I_B = 0$	200			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 4\text{A}; I_B = 20\text{mA}$			1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = 4\text{A}; I_B = 20\text{mA}$			2.0	V
I_{CEO}	Collector Cutoff Current	$V_{CE} = 200\text{V}; I_B = 0$			1.0	mA
I_{CBO}	Collector Cutoff Current	$V_{CB} = 320\text{V}; I_E = 0$			1.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 8\text{V}; I_C = 0$			10	mA
h_{FE}	DC Current Gain	$I_C = 5\text{A}; V_{CE} = 5\text{V}$	200			