

isc Silicon NPN Darlington Power Transistor

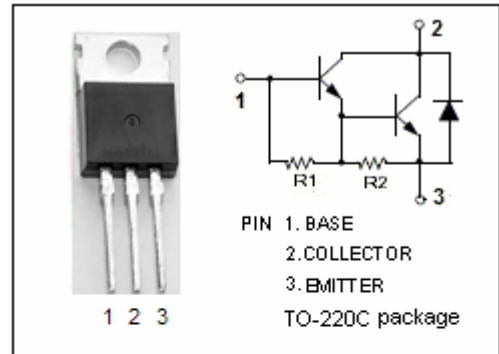
BU920T

DESCRIPTION

- High Voltage
- DARLINGTON

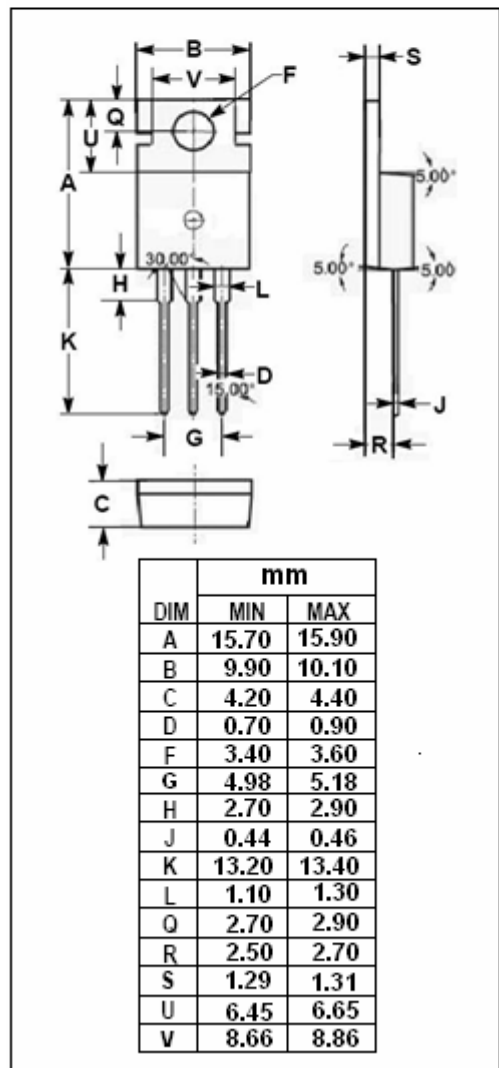
APPLICATIONS

- Designed for automotive ignition applications and inverter circuits for motor control.



ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CES}	Collector-Emitter Voltage V _{BE} = 0	400	V
V _{CEO}	Collector-Emitter Voltage	350	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current	10	A
I _{CM}	Collector Current-peak	15	A
I _B	Base Current	5	A
P _C	Collector Power Dissipation @T _C =25°C	105	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-65~150	°C



THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.2	°C/W

isc Silicon NPN Darlington Power Transistor**BU920T****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 0.1A; I _B = 0	350			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 5A; I _B = 50mA			1.8	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 7A; I _B = 140mA			1.8	V
V _{BE(sat)-1}	Base-Emitter Saturation Voltage	I _C = 5A; I _B = 50mA			2.2	V
V _{BE(sat)-2}	Base-Emitter Saturation Voltage	I _C = 7A; I _B = 140mA			2.5	V
I _{CES}	Collector Cutoff Current	V _{CE} = 400V; V _{BE} = 0 V _{CE} = 400V; V _{BE} = 0; T _j = 125°C			0.25 0.5	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = 350V; I _B = 0			0.25	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			50	mA
V _{ECF}	C-E Diode Forward Voltage	I _F = 7A			2.5	V