

Silicon NPN Darlington Power Transistor

BU920

DESCRIPTION

- High Voltage
- DARLINGTON

APPLICATIONS

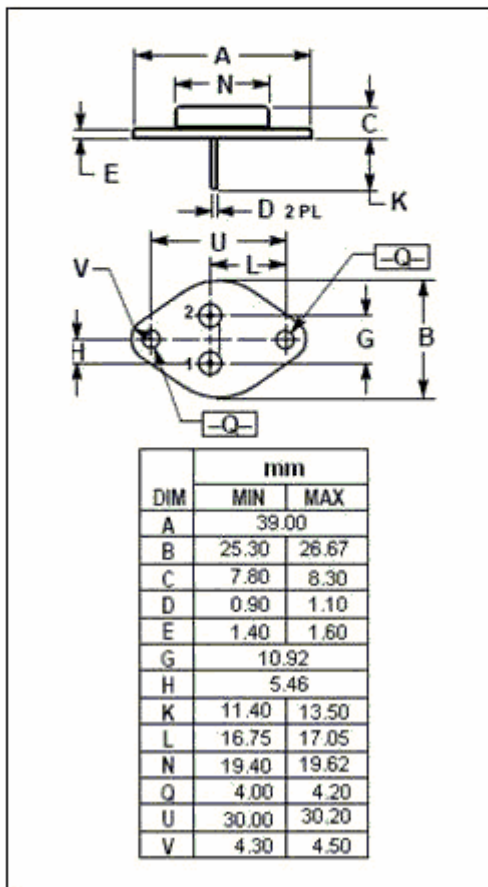
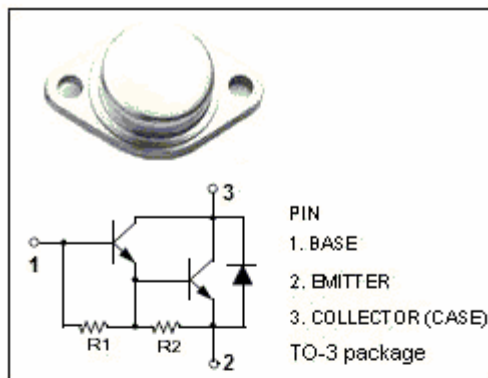
- Designed for automotive ignition applications and inverter circuits for motor control.

ABSOLUTE MAXIMUM RATINGS (T_a=25)

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	120	W
T _j	Junction Temperature	175	
T _{stg}	Storage Temperature Range	-65~175	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.25	/W



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ELECTRICAL CHARACTERISTICS

 $T_C=25$ 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	$V_{CE}= 400V; V_{BE}= 0$ $V_{CE}= 400V; V_{BE}= 0; T_j= 125$			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