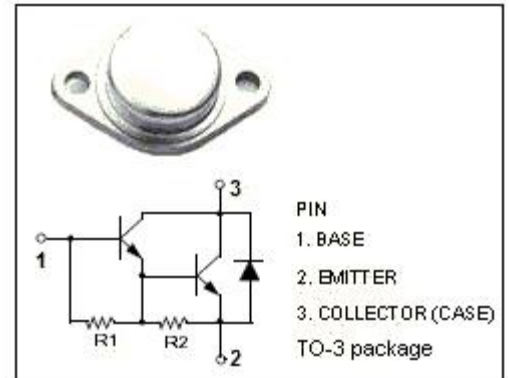


**isc Silicon NPN Darlington Power Transistor**
**BUX28**
**DESCRIPTION**

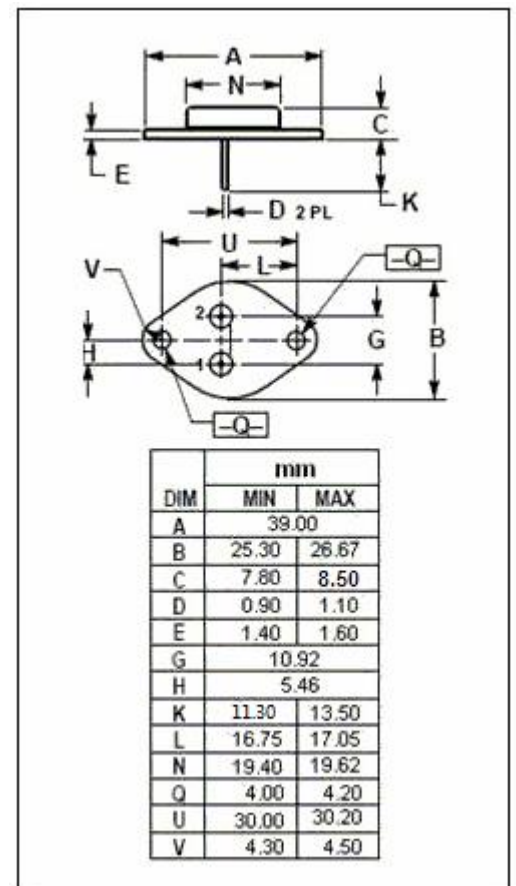
- Collector-Emitter Sustaining Voltage-  
 $V_{CEO(SUS)} = 350V(\text{Min})$
- High Reliability
- DARLINGTON
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for use in firing circuits of cars and general purpose switching applications at high voltages.


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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CEr}$	Collector-Emitter Voltage	350	V
$V_{CEO}$	Collector-Emitter Voltage	350	V
$V_{EBO}$	Emitter-Base Voltage	8	V
$I_c$	Collector Current-Continuous	8	A
$I_{CM}$	Collector Current-peak	12	A
$I_B$	Base Current	1.5	A
$P_C$	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	80	W
$T_j$	Junction Temperature	175	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-65~175	$^\circ\text{C}$


**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.2	$^\circ\text{C/W}$

**ELECTRICAL CHARACTERISTICS**

 T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = 30mA ; I <sub>B</sub> = 0	350			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 8A; I <sub>B</sub> = 0.3A			2.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 8A; I <sub>B</sub> = 0.3A			2.5	V
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = 350V; I <sub>B</sub> = 0 V <sub>CE</sub> = 350V; I <sub>B</sub> = 0; T <sub>C</sub> =125°C			1.0 10	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 6V; I <sub>C</sub> = 0			20	mA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = 5A ; V <sub>CE</sub> = 1.5V	50			
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 7A ; V <sub>CE</sub> = 1.5V	30			
V <sub>ECF</sub>	C-E Diode Forward Voltage	I <sub>F</sub> = 7A			1.5	V

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