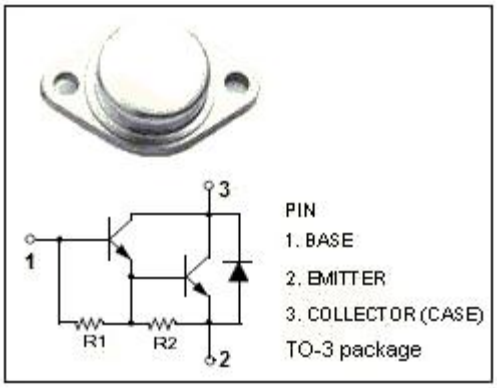
isc Silicon NPN Darlington Power Transistor BUX29

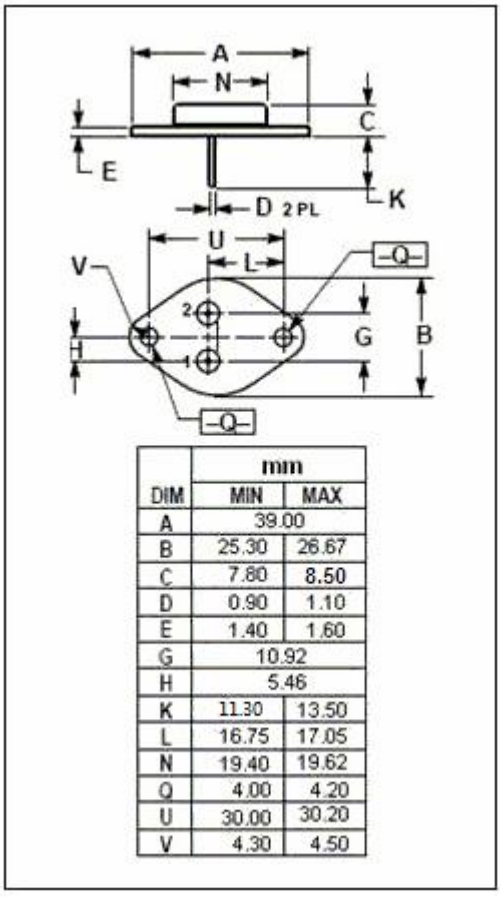
DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  $V_{CEO(SUS)}$= 400V(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.



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.50
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.30	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CER}	Collector-Emitter Voltage	400	V
V_{CEO}	Collector-Emitter Voltage	400	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	A
P_C	Collector Power Dissipation @T_C=25℃	80	W
T_j	Junction Temperature	175	℃
T_{stg}	Storage Temperature Range	-65~175	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Rresistance,Junction to Case	1.5	℃/W

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ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 30mA ;I_B= 0	400			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 7A; I_B= 0.3A			2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 7A; I_B= 0.3A			2.5	V
I_{CEO}	Collector Cutoff Current	V_{CE}= 400V; I_B= 0 V_{CE}= 400V; I_B= 0;T_C=125℃			1.0 10	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 6V; I_C= 0			20	mA
h_{FE-1}	DC Current Gain	I_C= 5A ; V_{CE}= 1.5V	50			
h_{FE-2}	DC Current Gain	I_C= 7A ; V_{CE}= 1.5V	30			
V_{ECF}	C-E Diode Forward Voltage	I_F= 7A			1.5	V