isc Silicon NPN Power Transistor BUP49

DESCRIPTION

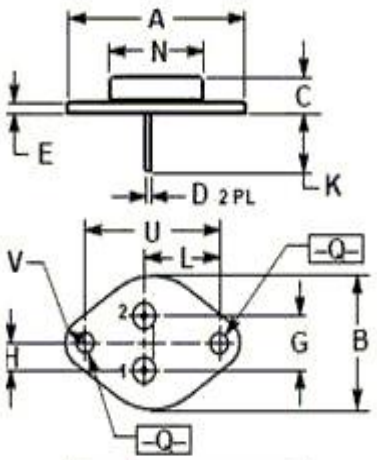
- Large collector current
- Low collector saturation voltage
- High power dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

pin 1.Base
2.Emitter
3.Collector

TO-3 package

APPLICATIONS

- Designed for use in DC-DC converter
- Driver of solenoid or motor
- For audio amplifier applications



DIM	mm MIN	MAX
A	39.00	
B	25.20	26.67
C	8.30	8.90
D	1.45	1.60
E	1.50	1.70
G	11.00	
H	5.50	
K	10.50	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	29.00	31.00
V	4.00	4.20

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	150	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current-Continuous	90	A
P_C	Collector Power Dissipation	300	W
T_J	Junction Temperature	-55~200	℃
T_{stg}	Storage Temperature	-55~200	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	0.58	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 30mA; I_B= 0	80		V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 1mA; I_E= 0	150		V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 1mA; I_C= 0	8		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 35A; I_B= 2A		1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 35A; I_B= 2A		1.5	V
I_{CEO}	Collector Cutoff Current	V_{CE}= 80V; I_B=0		0.1	mA
I_{CBO}	Collector Cutoff Current	V_{CB}= 150V; I_E=0		0.1	mA
h_{FE-1}	DC Current Gain	I_C= 80A; V_{CE}= 4V	15		