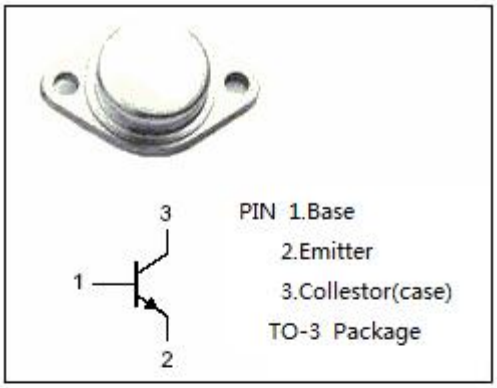
isc Silicon NPN Power Transistor — BU222A

DESCRIPTION

- High Collector-Base Breakdown Voltage-
  : $V_{(BR)CBO}$= 525V (Min)
- High Current Capability
- High Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

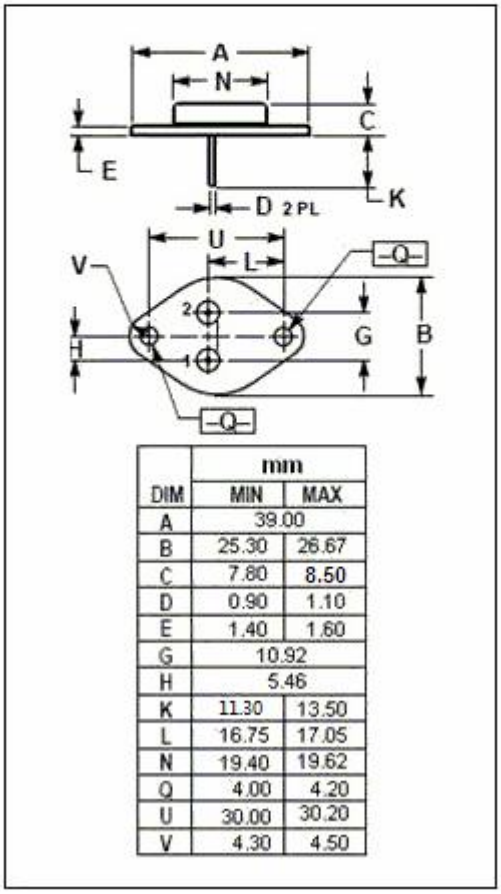


APPLICATIONS

- Switching regulators
- General purpose power amplifiers

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	MAX	UNIT
V_{CBO}	Collector-Base Voltage	525	V
V_{CEO}	Collector-Emitter Voltage	475	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current-Continuous	6	A
I_B	Base Current-Continuous	2	A
P_C	Collector Power Dissipation @T_C=25℃	75	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃



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

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 10mA ; I_B= 0	475			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 1mA ; I_E= 0	525			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 0.1mA ; I_C= 0	7			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 6A; I_B= 1.2A			1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 6A; I_B= 1.2A			1.2	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 525V; I_E=0			0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7V; I_C=0			0.1	mA
h_{FE-1}	DC Current Gain	I_C= 3A; V_{CE}= 4V	10			
h_{FE-2}	DC Current Gain	I_C= 6A; V_{CE}= 4V	3			
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A;V_{CE}= 10V;f_{test}= 1MHz	10			MHz