

isc Silicon NPN Power Transistor

BU222A

DESCRIPTION

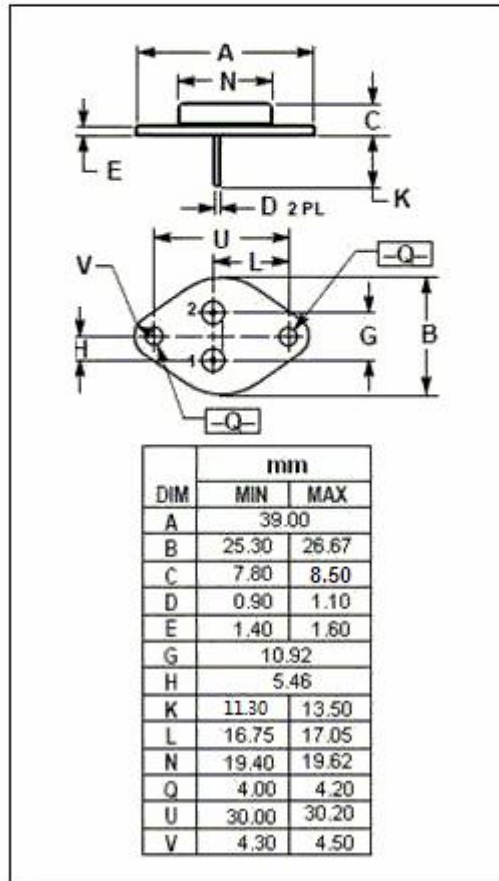
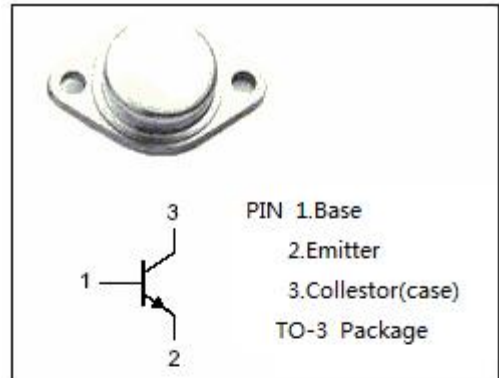
- High Collector-Base Breakdown Voltage-
: $V_{(BR)CBO} = 525V$ (Min)
- High Current Capability
- High Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching regulators
- General purpose power amplifiers

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ C$)

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 @ $T_c=25^\circ C$	75	W
T_j	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-65~150	$^\circ C$



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ELECTRICAL CHARACTERISTICS

T_C=25°C 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

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