

INCHANGE Semiconductor

isc Product Specification

isc Silicon NPN Power Transistors

BUX66/A

DESCRIPTION

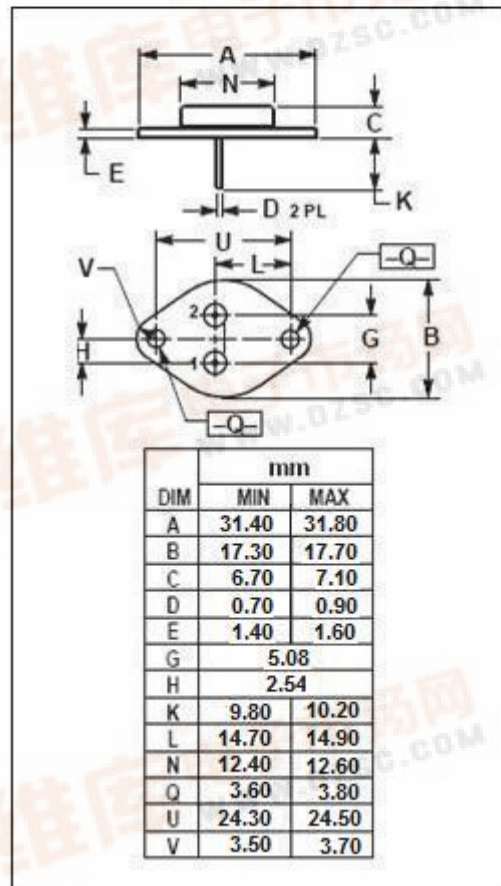
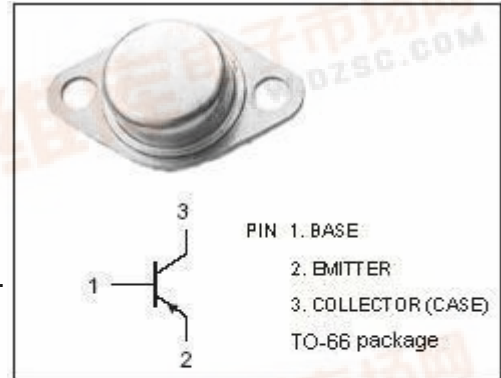
- Continuous Collector Current- $I_C = -2A$
- Power Dissipation- $P_D = 35W @ T_C = 25^\circ C$
- Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = -2.5V(Max) @ I_C = -1A$

APPLICATIONS

- Designed for high-speed switching and linear amplifier application for high-voltage operational amplifiers, switching regulators, converters, deflection stages and high fidelity amplifiers.

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

SYMBOL	PARAMETER		VALUE	UNIT
V_{CBO}	Collector-Base Voltage	BUX66	-200	V
		BUX66A	-300	
V_{CEO}	Collector-Emitter Voltage	BUX66	-150	V
		BUX66A	-250	
V_{EBO}	Emitter-Base Voltage		-6	V
I_C	Collector Current-Continuous		-2.0	A
I_{CP}	Collector Current-Peak		-5.0	A
I_B	Base Current		-1.0	A
P_C	Collector Power Dissipation@ $T_C = 25^\circ C$		35	W
T_J	Junction Temperature		200	$^\circ C$
T_{stg}	Storage Temperature		-65~200	$^\circ C$



isc Silicon NPN Power Transistors**BUX66/A****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	BUX66	$I_C = -200\text{mA}$; $I_B = 0$	-150			V
		BUX66A		-250			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage		$I_C = -1\text{A}$; $I_B = -0.15\text{A}$			-2.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage		$I_C = -1\text{A}$; $I_B = -0.15\text{A}$			-1.4	V
I_{CBO}	Collector Cutoff Current	BUX66	$V_{CB} = -150\text{V}$; $I_E = 0$			-1.0	mA
		BUX66A	$V_{CB} = -250\text{V}$; $I_E = 0$			-1.0	
I_{EBO}	Emitter Cutoff Current		$V_{EB} = -6\text{V}$; $I_C = 0$			-0.5	mA
h_{FE}	DC Current Gain		$I_C = -1\text{A}$; $V_{CE} = -5\text{V}$	10		150	
f_T	Current Gain-Bandwidth Product		$I_C = -0.5\text{A}$; $V_{CE} = -10\text{V}$		30		MHz