



查询"BUX23"供应商

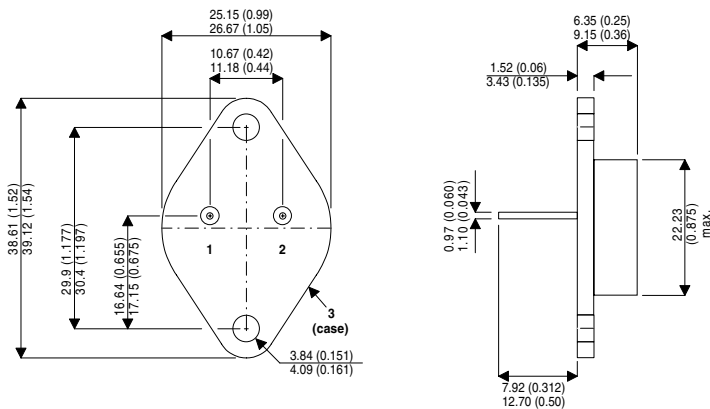
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BUX23

MECHANICAL DATA

Dimensions in mm(inches)

NPN MULTI - EPITAXIAL POWER TRANSISTOR



TO-3(TO204AA)

PIN 1 — Base PIN 2 — Emitter Case is Collector

FEATURES

- HIGH CURRENT
- FAST SWITCHING
- HIGH RELIABILITY

APPLICATIONS

- POWER SWITCHING CIRCUITS
- MOTOR CONTROL

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C unless otherwise stated)

V _{CBO}	Collector – Base Voltage (I _E = 0)	400V
V _{CEX}	Collector – Emitter Voltage	400V
V _{CEO}	Collector – Emitter Voltage (I _B = 0)	325V
V _{CER}	Collector – Emitter Voltage	390V
V _{EBO}	Emitter – Base Voltage (I _C = 0)	7V
I _C	Collector Current	30A
I _{CM}	Peak Collector Current (t _p = 10 ms)	40A
I _B	Base Current	6A
P _{tot}	Total Power Dissipation at T _{case} ≤ 25°C	350W
T _{stg}	Storage Temperature	-65 to 200°C
T _j	Junction Temperature	200°C

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Issue 1



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ELECTRICAL CHARACTERISTICS ($T_{case} = 25^{\circ}C$ unless otherwise stated)

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
$V_{CEO(BR)*}$ Collector - Emitter Breakdown Voltage	$I_C = 0.2mA$	325			V
V_{EBO} Emitter – Base Voltage	$I_E = 50mA$ $I_C = 0$	7			V
I_{CEO} Collector Cut-off Current	$V_{CE} = 260V$ $I_B = 0$			3	mA
I_{CEX} Collector Cut-off Current	$V_{CE} = 400V$ $V_{BE} = -1.5V$			3	mA
	$V_{CE} = 400V$ $V_{BE} = -1.5V$ $T_C = 125^{\circ}C$			12	
I_{EBO} Emitter Cut-off Current	$I_C = 0$ $V_{EB} = 5V$			1.0	mA
$V_{CE(sat)*}$ Collector – Emitter Saturation Voltage	$I_C = 8A$ $I_B = 1.6A$		0.2	0.8	V
	$I_C = 16A$ $I_B = 3.2A$		0.35	1.0	
$V_{BE(sat)*}$ Base – Emitter Saturation Voltage	$I_C = 16A$ $I_B = 3.2A$		1.15	1.5	V
h_{FE*} DC Current Gain	$I_C = 8A$ $V_{CE} = 4V$	15		60	—
	$I_C = 16A$ $V_{CE} = 4V$	8			
$I_{S/b}$ Second Breakdown Collector Current	$V_{CE} = 140V$ $t = 1s$	0.15			A
	$V_{CE} = 16V$ $t = 1s$	22			
f_T Transition Frequency	$I_C = 2A$ $V_{CE} = 15V$ $f = 10MHz$	8			MHz
t_{on} Turn–On Time	$I_C = 16A$ $I_{B1} = 3.2A$		0.55	1.3	μs
t_s Storage Time	$I_C = 16A$ $I_{B1} = 3.2A$		1.7	2.5	
t_f Fall Time	$I_{B2} = -3.2A$		0.26	1.2	

THERMAL CHARACTERISTICS

$R_{\theta JC}$	Thermal Resistance Junction to Case		0.5		$^{\circ}C/W$
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* Pulse test $t_p = 300\mu s$, $\delta = 1.5\%$

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