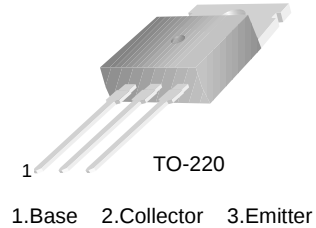


BU406/406H/408

High Voltage Switching

- Use In Horizontal Deflection Output Stage



NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	400	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current (DC)	7	A
I_{CP}	Collector Current (Pulse)	10	A
I_B	Base Current	4	A
P_C	Collector Dissipation	60	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	- 55 ~ 150	$^\circ\text{C}$

Electrical Characteristics $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
I_{CES}	Collector Cut-off Current	$V_{CE} = 400\text{V}, V_{BE} = 0$ $V_{CE} = 250\text{V}, V_{BE} = 0$ $V_{CE} = 250\text{V}, V_{BE} = 0 @ T_C=150^\circ\text{C}$		5 100 1	mA μA mA
I_{EBO}	Emitter Cut-off Current	$V_{BE} = 6\text{V}, I_C = 0$		1	mA
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage : BU406 : BU406H : BU408	$I_C = 5\text{A}, I_B = 0.5\text{A}$ $I_C = 5\text{A}, I_B = 0.8\text{A}$ $I_C = 6\text{A}, I_B = 1.2\text{A}$		1 1 1	V V V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage : BU406 : BU406H : BU408	$I_C = 5\text{A}, I_B = 0.5\text{A}$ $I_C = 5\text{A}, I_B = 0.5\text{A}$ $I_C = 6\text{A}, I_B = 1.2\text{A}$		1.2 1.2 1.5	V V V
f_T	Current Gain Bandwidth Product	$V_{CE} = 10\text{V}, I_C = 0.5\text{A}$	10		MHz
t_{OFF}	Turn OFF Time : BU406 : BU406H : BU408	$I_C = 5\text{A}, I_B = 0.5\text{A}$ $I_C = 5\text{A}, I_B = 0.8\text{A}$ $I_C = 6\text{A}, I_B = 1.2\text{A}$		0.75 0.4 0.4	μs μs μs

Typical Characteristics

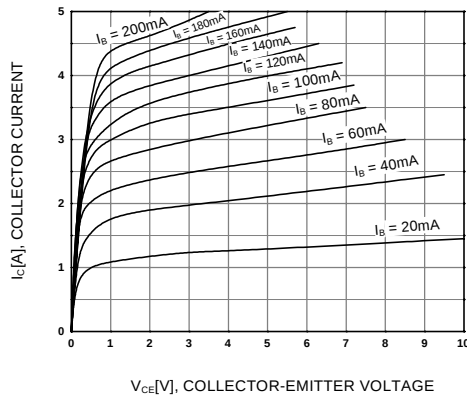


Figure 1. Static Characteristic

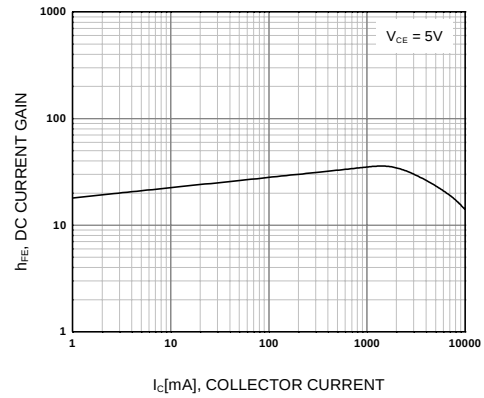


Figure 2. DC current Gain

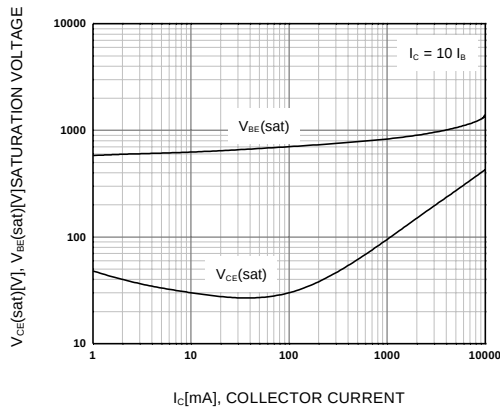


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

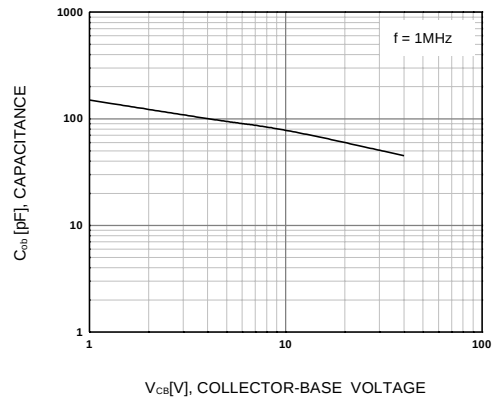


Figure 4. Collector Output Capacitance

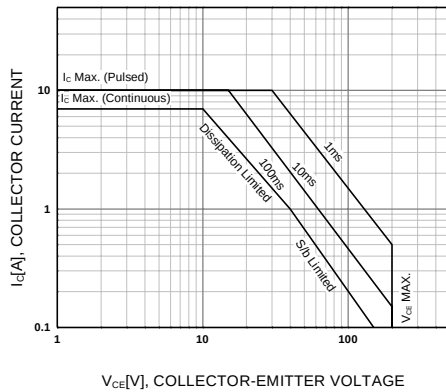


Figure 5. Safe Operating Area

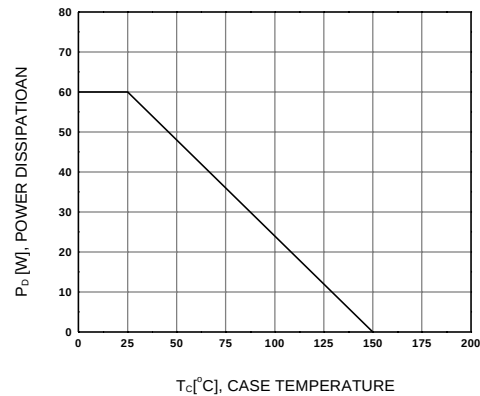


Figure 6. Power Derating

Typical Characteristics (Continued)

BU406/406H/408

Figure 7. Static Characteristic

Figure 8. DC current Gain

BU406/406H/408

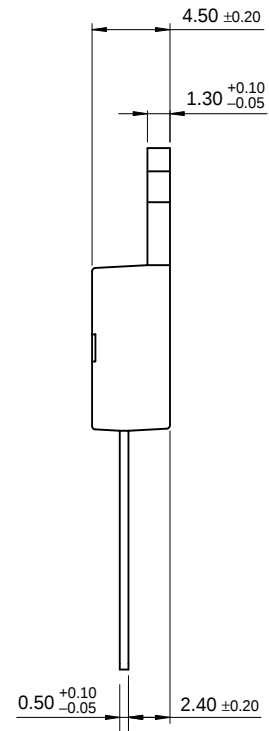
Technical drawing of a 3-pin connector, showing front and top views with dimensions in millimeters.

Front View Dimensions:

- Overall Width: 9.90 ± 0.20
- Overall Height: 18.95 MAX.
- Top Section Height: 2.80 ± 0.10
- Bottom Section Height: 15.90 ± 0.20
- Top Section Width (Internal): (8.70)
- Hole Diameter: $\varnothing 3.60 \pm 0.10$
- Top Section Thickness: 1.30 ± 0.10
- Bottom Section Thickness: (3.70)
- Pin Height: 13.08 ± 0.20
- Pin Width: 1.27 ± 0.10
- Pin Base Width: 0.80 ± 0.10
- Pin Chamfer: 45°
- Pin Spacing: 2.54 TYP [2.54 ± 0.20]

Top View Dimensions:

- Overall Width: 10.00 ± 0.20
- Pin Spacing: 2.54 TYP [2.54 ± 0.20]



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