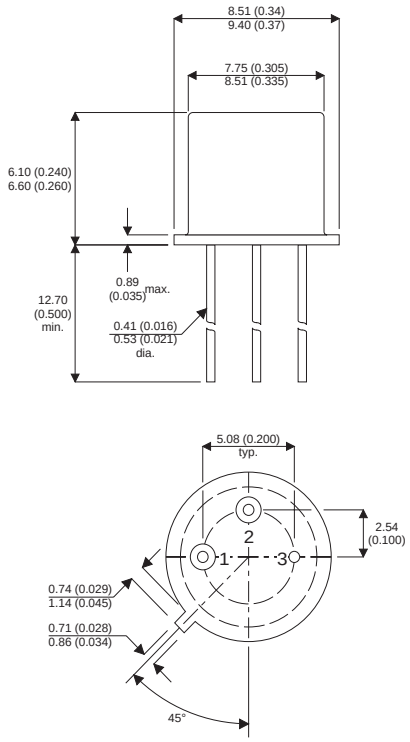
BFT36A

MECHANICAL DATA
Dimensions in mm(inches)

PNP SILICON TRANSISTOR



TO39 (TO205AD)

Pin 1 = Emitter **Pin 2 = Base** **Pin 3 = Collector**

FEATURES

- **FAST SWITCHING**
- **HIGH PULSE POWER**

APPLICATIONS

- **POWER SWITCHING CIRCUITS**
- **MOTOR CONTROL**

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

V_{CBO}	Collector – Base Voltage	- 100V
V_{CEO}	Collector – Emitter Voltage	- 80V
V_{EBO}	Emitter – Base Voltage	- 5V
I_C	Collector Current	- 3A
I_B	Base Current	- 2A
P_{tot}	Total Power Dissipation at $T_{case} \leq 25°C$	1W
T_{amb}	Ambient Operating Temperature	-55°C to +200°C
T_{stg},	Storage Temperature	-55°C to +200°C

Semelab plc. Telephone +44(0)1455 556565. Fax +44(0)1455 552612.
E-mail: sales@semelab.co.uk Website: http://www.semelab.co.uk

Document Number 3082
Issue 1

SEME LAB

BFT36A

ELECTRICAL CHARACTERISTICS (T_{amb} = 25°C unless otherwise stated)

Parameter		Test Conditions		Min.	Typ.	Max.	Unit
h_{21E}	Static Value of Common Emitter Forward Current Transfer Ratio	V_{CE} = - 10V	I_C = - 0.15	50		250	—
		V_{CE} = - 10V	I_C = - 2A	15			
		V_{CE} = - 10V	I_C = - 1mA	20			
f_T	Transistion Frequency	V_{CE} = - 5V f = 20MHz	I_C = - 100mA	50			MHz
I_{CBO}	Collector Base Cut- Off Current.	V_{CB} = - 80V	I_E = 0			- 100	nA
			t = 150°C			- 100	µA
I_{EBO}	Emitter–Base Cut-off Current					- 100	nA
h_{21e}	Small Signal Common Emitter Forward Current Transfer Ratio	V_{EB} = - 4V V_{CE} = - 5V	I_C = - 10mA	25			—
$V_{CE(sat)}$*	Collector – Emitter Saturation Voltage*	f = 1KHz				- 0.3	V
		I_C = - 150mA	I_B = - 15mA			- 0.6	
$V_{BE(sat)}$*	Base – Emitter Saturation Voltage*	I_C = - 1A	I_B = - 0.1A			- 0.95	V
		I_C = - 150mA	I_B = - 15mA			- 1.3	
C_{22b}	Common – Base Output Capacitance	V_{CB} = - 10V f = 1MHz	I_E = 0			80	pF

*Pulse Conditions: Pulse Length = 300µs duty cycle = 1.5%

Semelab plc. Telephone +44(0)1455 556565. Fax +44(0)1455 552612.
E-mail: sales@semelab.co.uk Website: http://www.semelab.co.uk

Document Number 3082
Issue 1