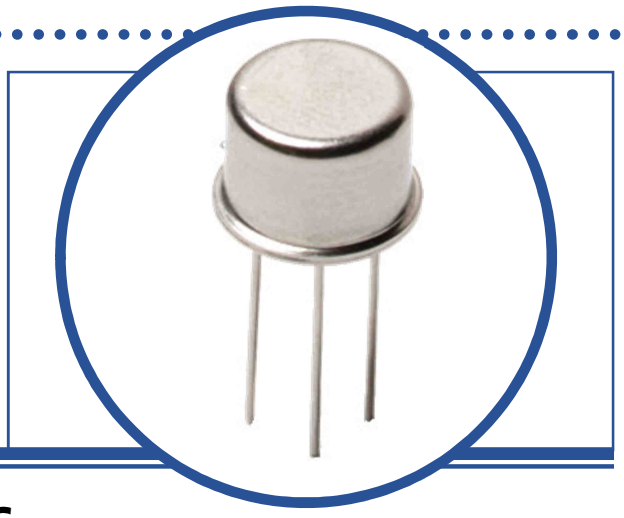
SILICON PLANAR EPITAXIAL PNP TRANSISTOR

TT electronics
Semelab Limited

BFX87



- Hermetic TO-39 Metal package.
- Screening Options Available

ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise stated)

V_{CBO}	Collector – Base Voltage		-50V
V_{CEO}	Collector – Emitter Voltage		-50V
V_{EBO}	Emitter – Base Voltage		-5V
I_C	Continuous Collector Current		-600mA
I_{CM}	Peak Collector Current		-600mA
I_{EM}	Peak Emitter Current		-600mA
P_D	Total Power Dissipation at	T_A = 25°C	0.6W
		Derate Above 25°C	5.9mW/°C
T_J	Junction Temperature Range		-65 to +200°C
T_{stg}	Storage Temperature Range		-65 to +200°C

THERMAL PROPERTIES

Symbols	Parameters	Max.	Units
$R_{\theta JA}$	Thermal Resistance, Junction To Ambient	291.6	°C/W

SEMELAB
A subsidiary of TT electronics plc.

Semelab Limited Coventry Road, Lutterworth, Leicestershire, LE17 4JB
Telephone +44 (0) 1455 556565 Fax +44 (0) 1455 552612 Email: sales@semelab-tt.com Website: http://www.semelab-tt.com

SILICON PLANAR EPITAXIAL PNP TRANSISTOR BFX87

TT electronics
Semelab Limited

ELECTRICAL CHARACTERISTICS (T_C = 25°C unless otherwise stated)

Symbols	Parameters	Test Conditions		Min.	Typ	Max.	Units
I_{CBO}	Collector Cut-off current	V_{CB} = -40V	I_E = 0			-50	nA
		V_{CB} = -50V	I_E = 0			-500	
		V_{CB} = -40V	I_E = 0 T_A= +100°C			-2	µA
I_{EBO}	Emitter Cut-Off Current	V_{EB} = -3.0V	I_C = 0			-100	nA
		V_{EB} = -4.0V	I_C = 0			-500	
h_{FE} (1)	Forward-current transfer ratio	V_{CE} = -10V	I_C = -1.0mA	40			-
			I_C = -10mA	40			
			I_C = -150mA	40			
			I_C = -500mA	25			
$V_{CE(sat)}$ (1)	Collector-Emitter Saturation Voltage	I_C = -150mA	I_B = -15mA			-0.4	V
$V_{BE(sat)}$ (1)	Base-Emitter Saturation Voltage	I_C = -30mA	I_B = -1.0mA			-0.9	
		I_C = -150mA	I_B = -15mA			-1.3	

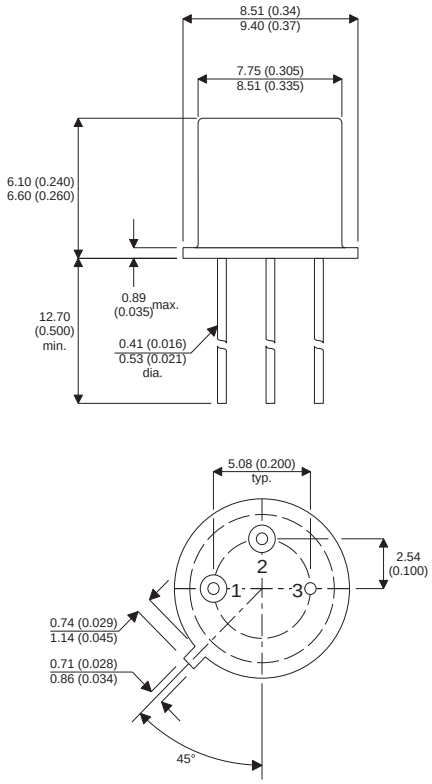
DYNAMIC CHARACTERISTICS

C_{obo}	Output Capacitance	V_{CB} = -10V f = 1.0MHz	I_E = 0		12	pF
C_{ibo}	Input Capacitance	V_{EB} = -2V f = 1.0MHz	I_C = 0		30	
f_T	Transition Frequency	V_{CE} = -10V f = 100MHz	I_C = -50mA	100		MHz

Notes
(1) Pulse Width ≤ 380us, δ ≤ 2%

SILICON PLANAR EPITAXIAL PNP TRANSISTOR
BFX87

MECHANICAL DATA
Dimensions in mm (inches)



TO-39 (TO-205AD) METAL PACKAGE
Underside View

Pin 1 - Emitter Pin 2 - Base Pin 3 - Collector