

Technical Data

TRANSISTOR

maximum ratings

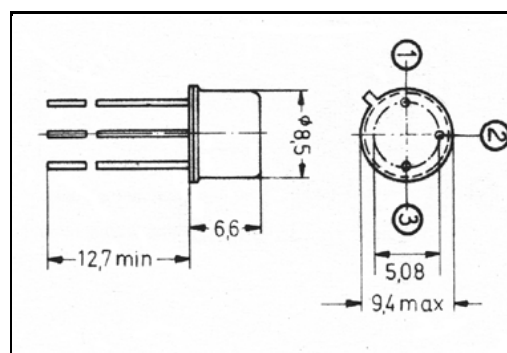
Voltage, Collector to Base (VCBO)	40.0	V	NO.	BFW16A
Voltage, Collector to Emitter (VCE)	25.0	V	TYPE	NPN-RF
Voltage, Emitter to Base (VEBO)	3.0	V		
Collector Current (IC)	0.3	A		
Base Current (IB)	0.05	A	CASE	TO-39
Max. Power Dissipation (PT) at TC = 75 °C	2.5	W		
Max. Thermal Resistance (Rth J-C)	50.0	°C/W		
Max. Junction Temperature (TJ)	200.0	°C		

PERFORMANCE CHARACTERISTICS at $T_c = 25^\circ\text{C}$, unless otherwise noted

NO.	SYMBOL	CONDITIONS	MIN.	MAX.	UNITS
1.	BVCEO	IC = 10.0 mA (1)	25.0	-	V
2.	BVEBO	IE = 100.0 μA	3.0	-	V
3.	ICEO	VCE = 15.0 V	-	20.0	μA
4.	ICEX	VCE = 35.0 V, VBE = 1.5 V	-	5.0	mA
5.	IEBO	VEB = 3.0 V	-	100.0	μA
6.	hFE	IC = 50.0 mA, VCE = 15.0 V (1)	25.0	120.0	-
7.	VCE(SAT)	IC = 100.0 mA, IB = 20.0 mA (1)	-	0.75	V
8.	fT	IC = 50.0 mA, VCE = 15.0 V, f = 200.0 MHz (2)	1.2	-	GHz
9.	Cobo	VCB = 15.0 V, f = 1.0 MHz	-	4.0	pF
10.	PIN	VCE = 15.0 V, Pout = 150.0 mW, f = 200.0 MHz	-	12.0	mW
11.	GPE	VCE = 15.0 V, Pout = 150.0 mW, f = 200.0 MHz	11.0	-	dB
12.	η	VCE = 15.0 V, Pout = 150.0 mW, f = 200.0 MHz	45.0	-	%
13.	NF	VCE = 15.0 V, IC = 30.0 mA, f = 200.0 MHz	-	6.0	dB
14.					
15.					
16.					
17.					
18.					
19.					
20.					

Notes (1) pulse-tested $t_p \leq 300 \mu\text{s}$, duty cycle $\leq 2\%$
(2) typical value

DIMENSIONS
in mm



Marking BFW16A
Customer GENERAL PURPOSE