

# Technical Data

## TRANSISTOR

### maximum ratings

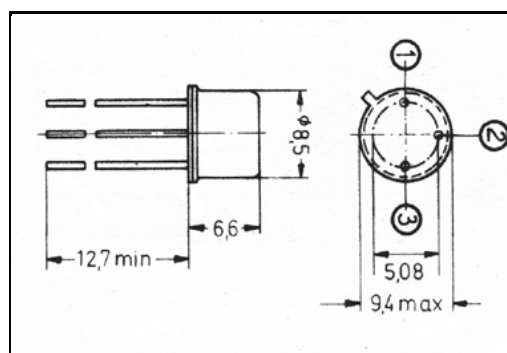
Voltage, Collector to Base (VCBO)	100.0	V	NO.	BSW66A
Voltage, Collector to Emitter (VCE)	100.0	V	TYPE	NPN
Voltage, Emitter to Base (VEBO)	6.0	V		
Collector Current (IC)	2.0	A		
Base Current (IB)		A	CASE	TO-39
Max. Power Dissipation (PT) at TC = 25 °C	5.0	W		
Max. Thermal Resistance (Rth J-C)	35.0	°C/W		
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)	100.0	-	V
2.	ICBO	VCB = 100.0 V	-	100.0	μA
3.	ICBO	VCB = 50.0 V	-	100.0	nA
4.	IEBO	VEB = 6.0 V	-	100.0	μA
5.	IEBO	VEB = 3.0 V	-	100.0	nA
6.	hFE	IC = 10.0 mA, VCE = 5.0 V (1)	30.0	-	-
7.	hFE	IC = 100.0 mA, VCE = 5.0 V (1)	40.0	-	-
8.	hFE	IC = 500.0 mA, VCE = 5.0 V (1)	30.0	-	-
9.	hFE	IC = 1.0 A, VCE = 5.0 V (1)	15.0	-	-
10.	VCE(SAT)	IC = 100.0 mA, IB = 10.0 mA (1)	-	0.15	V
11.	VCE(SAT)	IC = 500.0 mA, IB = 50.0 mA (1)	-	0.5	V
12.	VCE(SAT)	IC = 1.0 A, IB = 150.0 mA (1)	-	1.0	V
13.	VBE(SAT)	IC = 100.0 mA, IB = 10.0 mA (1)	-	0.9	V
14.	VBE(SAT)	IC = 500.0 mA, IB = 50.0 mA (1)	-	1.1	V
15.	VBE(SAT)	IC = 1.0 A, IB = 150.0 mA (1)	-	1.4	V
16.	fT	IC = 100.0 mA, VCE = 20.0 V (2)	130.0	-	MHz
17.	Cobo	VCB = 10.0 V	-	20.0	pF
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 BSW66A  
Customer GENERAL PURPOSE