

**HF/VHF power transistor**

**BLW96**

**Description:**

N-P-N silicon planar epitaxial transistor intended for use in class-A, AB and B operated high power industrial and military transmitting equipment in the HF and VHF band. The transistor presents excellent performance as a linear amplifier in s.s.b. applications. It is resistance stabilized and is guaranteed to withstand severe load mismatch conditions.

**Features:**

The transistor has a 1/2" flange envelope with a ceramic cap. All leads are isolated from the flange.

**Data:**

MODE OF OPERATION	V <sub>CE</sub> V	f MHz	P <sub>L</sub> W	G <sub>p</sub> dB	η %	d <sub>3</sub> dB	d <sub>5</sub> dB	I <sub>C(zs)</sub> (I <sub>C</sub> ) A
s.s.b. (class-AB)	50	1,6 – 28	25 – 200 (P.E.P.)	> 13,5	> 40 <sup>(1)</sup>	< -30	< -30	0,1
c.w. (class-B)	50	108	200	typ. 6,5	typ. 67	-	-	(6)
s.s.b. (class-A)	40	28	50 (P.E.P.)	typ. 19	-	typ. -40	< -40	(4)

**RATINGS**

Limiting values in accordance with the Absolute Maximum System (IEC 134)

Collector-emitter voltage (V<sub>BE</sub> = 0)

peak value

V<sub>CESM</sub> max. 110 V

Collector-emitter voltage (open base)

V<sub>CEO</sub> max. 55 V

Emitter-base voltage (open collector)

V<sub>EBO</sub> max. 4 V

Collector current (average)

I<sub>C(AV)</sub> max. 12 A

Collector current (peak value); f > 1 MHz

I<sub>CM</sub> max. 40 A

R.F. power dissipation (f > 1 MHz); T<sub>mb</sub> = 45 °C

P<sub>rf</sub> max. 340 W

Storage temperature

T<sub>stg</sub> -65 to + 150 °C

Operating junction temperature

T<sub>j</sub> max. 200 °C

**Drawings:**

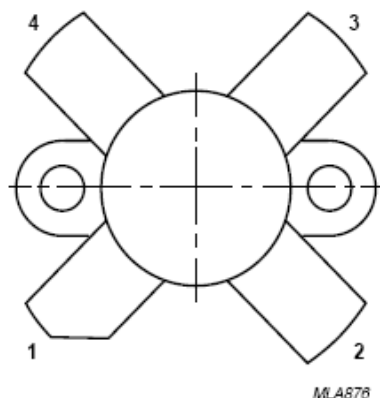


Fig.1 Simplified outline. SOT121B.

PIN	DESCRIPTION
1	collector
2	emitter
3	base
4	emitter