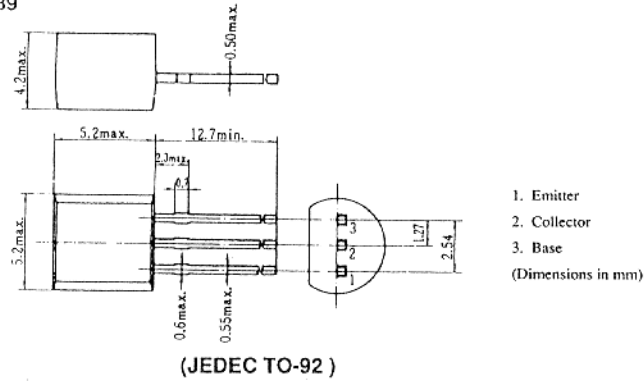


## 2SB1058

SILICON PNP EPITAXIAL

LOW FREQUENCY POWER AMPLIFIER

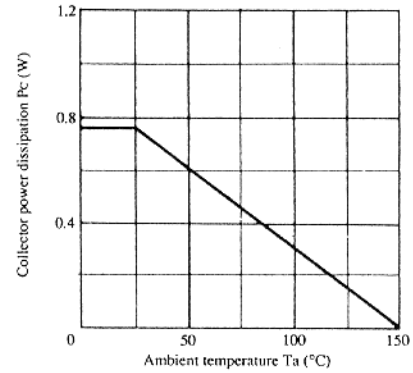
Complementary pair with 2SD1489



### ■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SB1058	Unit
Collector to base voltage	V <sub>CB0</sub>	-20	V
Collector to emitter voltage	V <sub>CE0</sub>	-16	V
Emitter to base voltage	V <sub>EB0</sub>	-6	V
Collector current	I <sub>c</sub>	-2	A
Collector power dissipation	P <sub>c</sub>	0.75	W
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

### MAXIMUM COLLECTOR DISSIPATION CURVE



### ■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>c</sub> = -10μA, I <sub>E</sub> = 0	-20	—	—	V
Collector to emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>c</sub> = -1mA, R <sub>BE</sub> = ∞	-16	—	—	V
Emitter to base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = -10μA, I <sub>c</sub> = 0	-6	—	—	V
Collector cutoff current	I <sub>cBO</sub>	V <sub>CB</sub> = -16V, I <sub>E</sub> = 0	—	—	-2	μA
Emitter cutoff current	I <sub>EBO</sub>	V <sub>EB</sub> = -6V, I <sub>c</sub> = 0	—	—	-0.2	μA
DC current transfer ratio	h <sub>FE</sub> *	V <sub>CE</sub> = -2V, I <sub>c</sub> = -0.1A	100	—	320	
Collector to emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>c</sub> = -1A, I <sub>B</sub> = -0.1A	—	—	-0.3	V
Gain bandwidth product	f <sub>r</sub>	V <sub>CE</sub> = -2V, I <sub>c</sub> = -10mA	—	80	—	MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f = 1MHz	—	50	—	pF

\* The 2SB1058 is grouped by h<sub>FE</sub> as follows.

B	C
100 to 200	160 to 320

■ See characteristic curves of 2SB738.