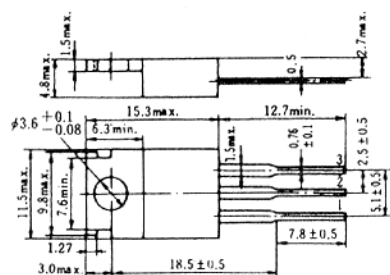


2SB1101, 2SB1102

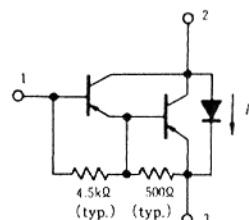
SILICON PNP TRIPLE DIFFUSED

LOW FREQUENCY POWER AMPLIFIER

COMPLEMENTARY PAIR WITH 2SD1601, 2SD1602



1. Base
2. Collector
(Flange)
3. Emitter
(Dimensions in mm)



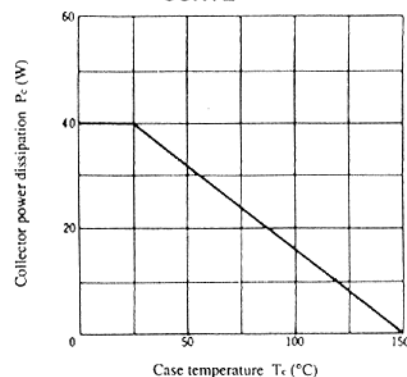
(JEDEC TO-220AB)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SB1101	2SB1102	Unit
Collector to base voltage	V _{CB0}	-60	-80	V
Collector to emitter voltage	V _{CE0}	-60	-80	V
Emitter to base voltage	V _{EB0}	-7	-7	V
Collector current	I _C	-4	-4	A
Collector peak current	i _{Cpeak}	-8	-8	A
Collector power dissipation	P _C *	40	40	W
Junction temperature	T _j	150	150	°C
Storage temperature	T _{stg}	-55 to +150	-55 to +150	°C
C to E diode forward current	I _D *	4	4	A

* Value at $T_c = 25^\circ\text{C}$

MAXIMUM COLLECTOR DISSIPATION
CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Test Condition	2SB1101			2SB1102			Unit
			min.	typ.	max.	min.	typ.	max.	
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -25mA, R_{BE} = \infty$	-60	—	—	-80	—	—	V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	$I_E = -50mA, I_C = 0$	-7	—	—	-7	—	—	V
Collector cutoff current	I_{CBO}	$V_{CB} = -60V, I_E = 0$	—	—	-100	—	—	-100	μA
	I_{CEO}	$V_{CE} = -50V, R_{BE} = \infty$	—	—	-10	—	—	-10	μA
DC current transfer ratio	h_{FE}	$V_{CE} = -3V, I_C = -2A^*$	1000	—	20000	1000	—	20000	
Collector to emitter saturation voltage	$V_{CE(sat)1}$	$I_C = -2A, I_B = -4mA^*$	—	—	-1.5	—	—	-1.5	V
	$V_{CE(sat)2}$	$I_C = -4A, I_B = -40mA^*$	—	—	-3.0	—	—	-3.0	
Base to emitter saturation voltage	$V_{BE(sat)1}$	$I_C = -2A, I_B = -4mA^*$	—	—	-2.0	—	—	-2.0	V
	$V_{BE(sat)2}$	$I_C = -4A, I_B = -40mA^*$	—	—	-3.5	—	—	-3.5	
C to E diode forward voltage	V_D	$I_D = 4A$	—	—	3.0	—	—	3.0	V
Turn on time	t_{on}	$I_C = -2A,$ $I_{B1} = -I_{B2} = -4mA$	—	0.8	—	—	0.8	—	μs
Storage time	t_{stg}		—	4.0	—	—	4.0	—	
Fall time	t_f		—	1.0	—	—	1.0	—	

* Pulse Test

