

2SB906

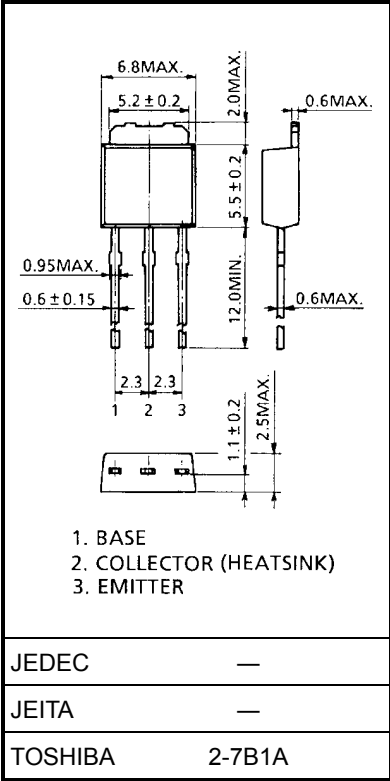
Audio Frequency Power Amplifier Application

- Low collector saturation voltage
: $V_{CE(sat)} = -1.0\text{ V (typ.)}$ ($I_C = -3\text{ A}$, $I_B = -0.3\text{ A}$)
- High power dissipation: $P_C = 20\text{ W}$ ($T_c = 25^\circ\text{C}$)
- Complementary to 2SD1221
- ハイブリッド対応外形の (B) 2SB906 (LB) もあります。

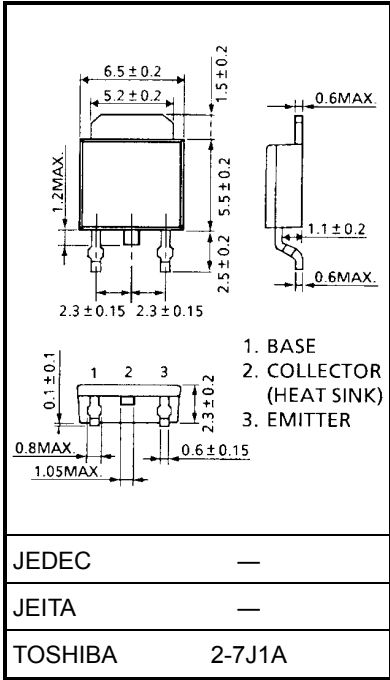
Maximum Ratings ($T_a = 25^\circ\text{C}$)

Characteristics		Symbol	Rating	Unit
Collector-base voltage		V_{CBO}	-60	V
Collector-emitter voltage		V_{CEO}	-60	V
Emitter-base voltage		V_{EBO}	-7	V
Collector current		I_C	-3	A
Base current		I_B	-0.5	A
Collector power dissipation	$T_a = 25^\circ\text{C}$	P_C	1.0	W
	$T_c = 25^\circ\text{C}$		20	
Junction temperature		T_j	150	$^\circ\text{C}$
Storage temperature range		T_{stg}	-55 to 150	$^\circ\text{C}$

Unit: mm

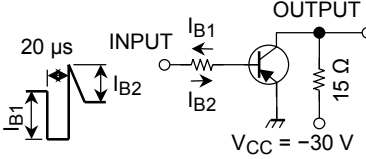


Weight: 0.36 g (typ.)



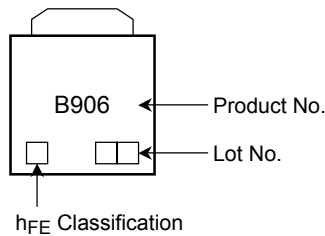
Weight: 0.36 g (typ.)

Electrical Characteristics (Ta = 25°C)

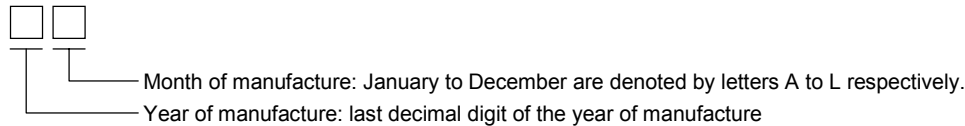
Characteristics		Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current		ICBO	V _{CB} = -60 V, I _E = 0	—	—	-100	μA
Emitter cut-off current		IEBO	V _{EB} = -7 V, I _C = 0	—	—	-100	μA
Collector-emitter breakdown voltage		V _(BR) CEO	I _C = -50 mA, I _B = 0	-60	—	—	V
DC current gain	h _{FE} (1) (Note)		V _{CE} = -5 V, I _C = -0.5 A	60	—	200	
	h _{FE} (2)		V _{CE} = -5 V, I _C = -3 A	20	—	—	
Collector-emitter saturation voltage		V _{CE} (sat)	I _C = -3 A, I _B = -0.3 A	—	-1.0	-1.7	V
Base-emitter voltage		V _{BE}	V _{CE} = -5 V, I _C = -0.5 A	—	-1.0	-1.5	V
Transition frequency		f _T	V _{CE} = -5 V, I _C = -0.5 A	—	9	—	MHz
Collector output capacitance		C _{ob}	V _{CB} = -10 V, I _E = 0, f = 1 MHz	—	90	—	pF
Switching time	Turn-on time	t _{on}	 -I _{B1} = I _{B2} = 0.2 A, DUTY CYCLE ≤ 1%	—	0.4	—	μs
	Storage time	t _{stg}		—	1.7	—	
	Fall time	t _f		—	0.5	—	

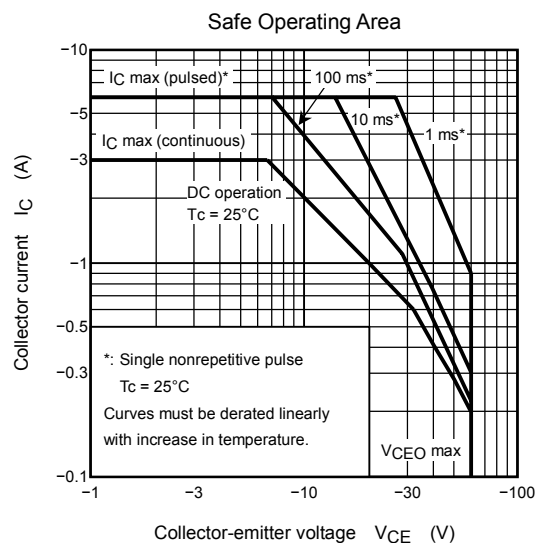
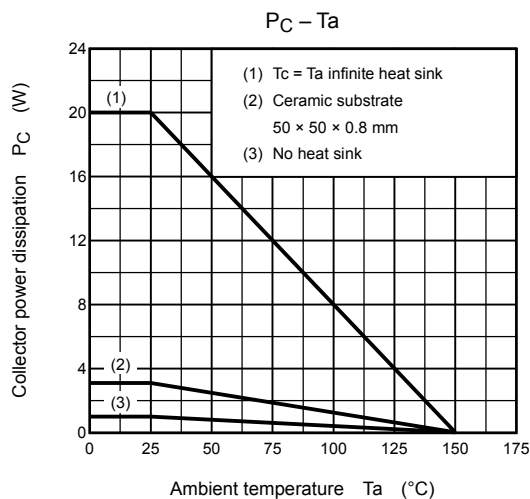
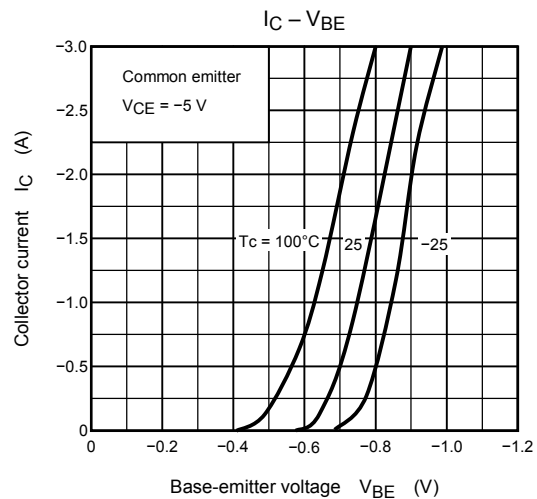
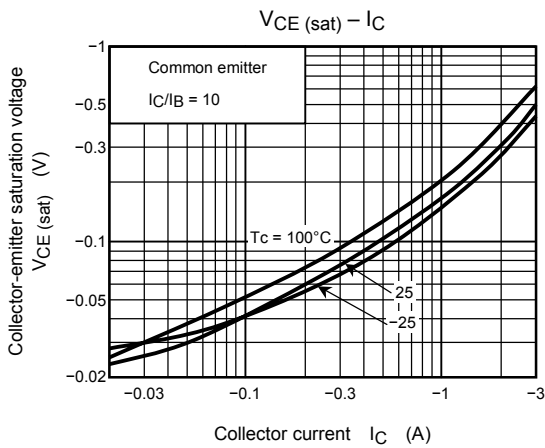
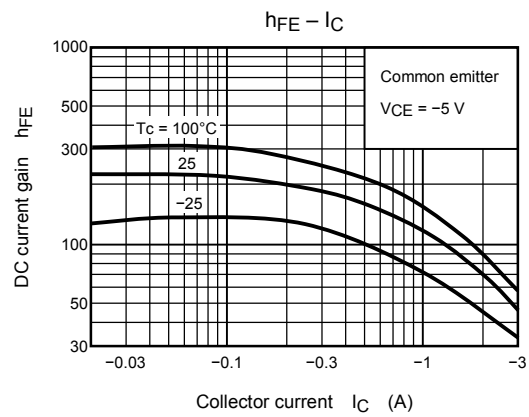
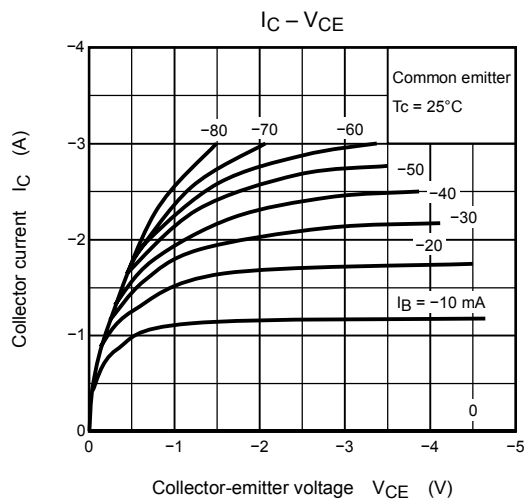
Note: h_{FE} (1) classification O: 60 to 120, Y: 100 to 200

Marking



Explanation of Lot No.





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