Silicon NPN Epitaxial

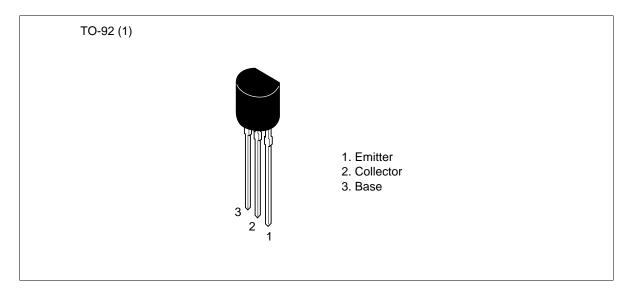
HITACHI

ADE-208-1134 (Z) 1st. Edition Mar. 2001

Application

- Low frequency power amplifier
- Complementary pair with 2SB561

Outline





Absolute Maximum Ratings (Ta = 25°C)

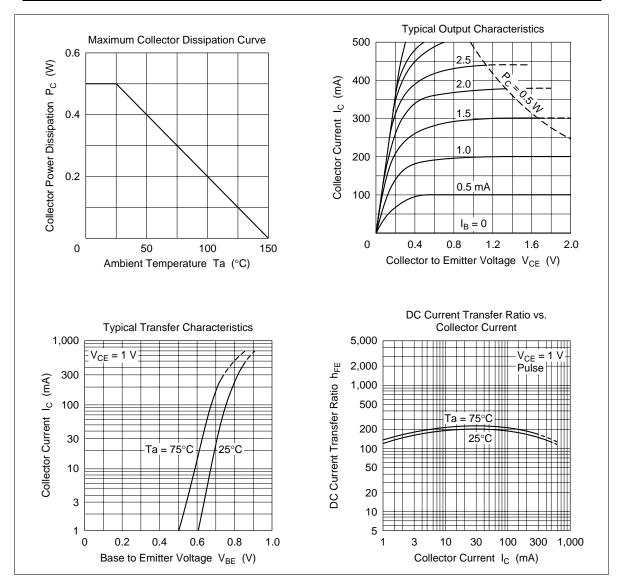
Item	Symbol	Ratings	Unit
Collector to base voltage	V _{CBO}	25	V
Collector to emitter voltage	V _{CEO}	20	V
Emitter to base voltage	V _{EBO}	5	V
Collector current	Ι _c	0.7	А
Collector peak current	i _{C(peak)}	1.0	А
Collector power dissipation	P _c	0.5	W
Junction temperature	Tj	150	٥C
Storage temperature	Tstg	-55 to +150	°C

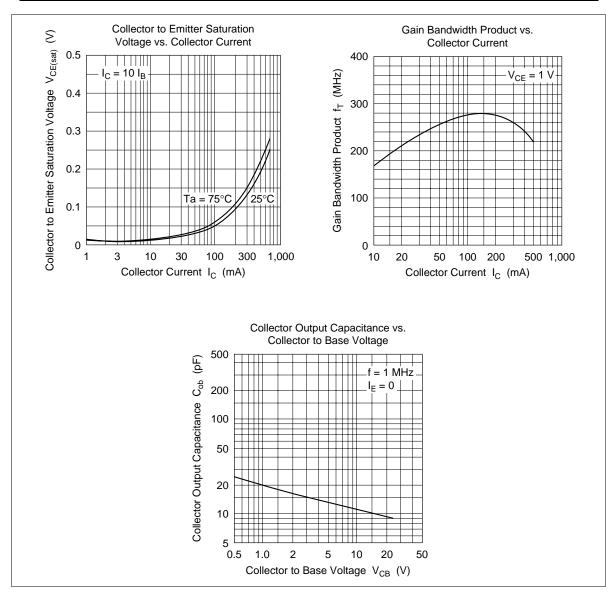
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{\rm (BR)CBO}$	25	_	_	V	$I_{c} = 10 \ \mu A, \ I_{E} = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	20	_	_	V	$I_c = 1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	5	_	_	V	$I_{\rm E} = 10 \ \mu A, \ I_{\rm C} = 0$
Collector cutoff current	I _{CBO}	_	_	1.0	μΑ	$V_{CB} = 20 \text{ V}, I_{E} = 0$
DC current transfer ratio	h _{FE} *1	85	—	240		V_{CE} = 1 V, I _C = 0.15 A (Pulse test)
Collector to emitter saturation voltage	$V_{\text{CE(sat)}}$	—	0.19	0.5	V	$I_{c} = 0.5 \text{ A}, I_{B} = 0.05 \text{ A}$ (Pulse test)
Base to emitter voltage	V_{BE}	—	0.76	1.0	V	V_{CE} = 1 V, I _C = 0.15 A (Pulse test)
Gain bandwidth product	f _T	_	280	_	MHz	V_{CE} = 1 V, I _C = 0.15 A (Pulse test)
Collector output capacitance	Cob	_	12		pF	$V_{CB} = 10 \text{ V}, \text{ I}_{E} = 0, \text{ f} = 1 \text{ MHz}$
Note: 1. The 2SD467 is grouped by h_{FE} as follows.						

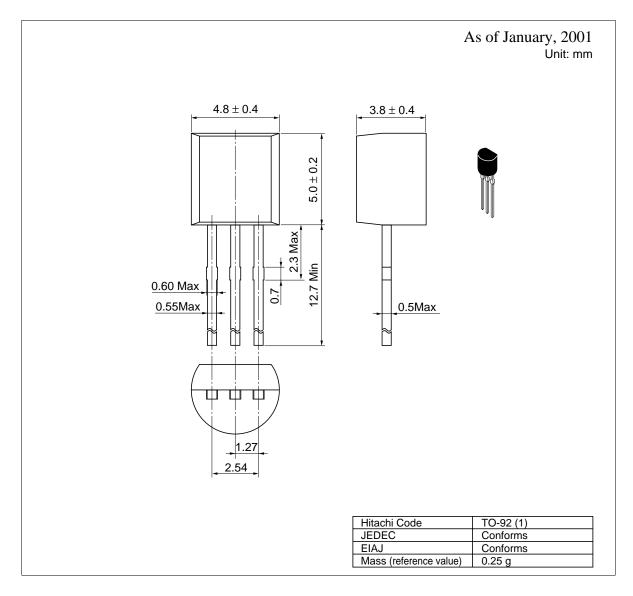
В С 120 to 240

85 to170





Package Dimensions



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