
2SD468

Silicon NPN Epitaxial

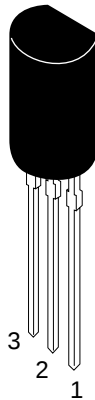
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Application

- Low frequency power amplifier
- Complementary pair with 2SB562

Outline

TO-92MOD



1. Emitter
2. Collector
3. Base

Absolute Maximum Ratings (Ta = 25°C)

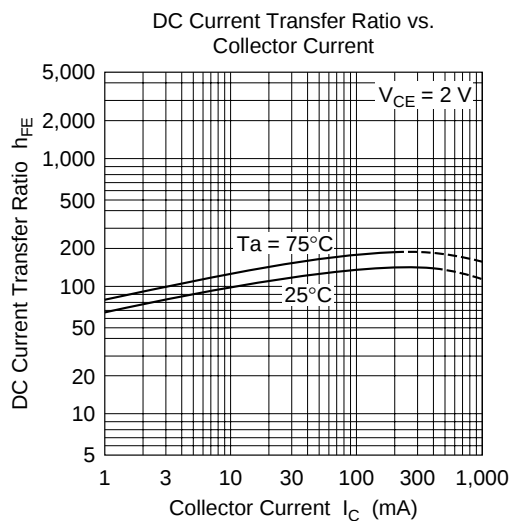
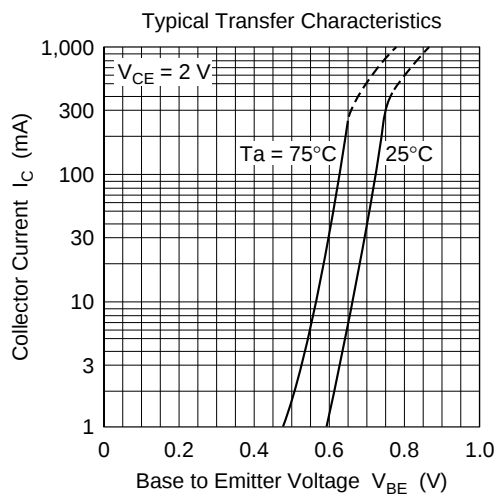
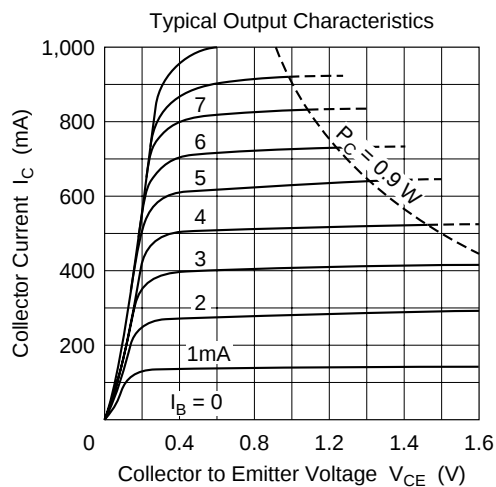
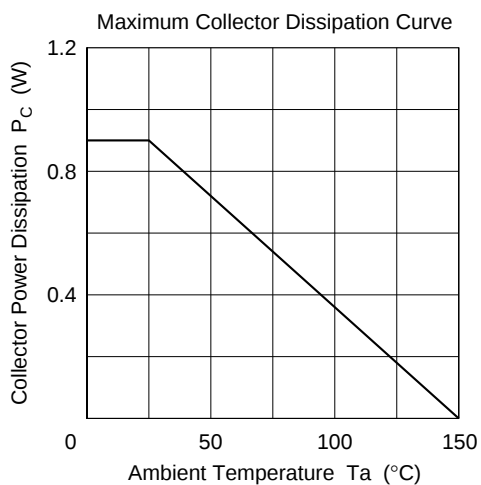
Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	25	V
Collector to emitter voltage	V_{CEO}	20	V
Emitter to base voltage	V_{EBO}	5	V
Collector current	I_C	1.0	A
Collector peak current	$i_{C(peak)}$	1.5	A
Collector power dissipation	P_C	0.9	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

Electrical Characteristics (Ta = 25°C)

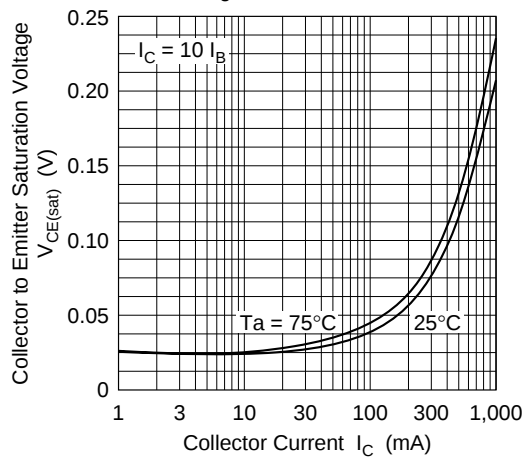
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	25	—	—	V	$I_C = 10\text{ }\mu\text{A}$, $I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	20	—	—	V	$I_C = 1\text{ mA}$, $R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	5	—	—	V	$I_E = 10\text{ }\mu\text{A}$, $I_C = 0$
Collector cutoff current	I_{CBO}	—	—	1.0	μA	$V_{CB} = 20\text{ V}$, $I_E = 0$
DC current transfer ratio	h_{FE}^{*1}	85	—	240		$V_{CE} = 2\text{ V}$, $I_C = 0.5\text{ A}^{*2}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	0.2	0.5	V	$I_C = 0.8\text{ A}$, $I_B = 0.08\text{ A}^{*2}$
Base to emitter voltage	V_{BE}	—	0.79	1.0	V	$V_{CE} = 2\text{ V}$, $I_C = 0.5\text{ A}^{*2}$
Gain bandwidth product	f_T	—	190	—	MHz	$V_{CE} = 2\text{ V}$, $I_C = 0.5\text{ A}^{*2}$
Collector output capacitance	C_{ob}	—	22	—	pF	$V_{CB} = 10\text{ V}$, $I_E = 0$, $f = 1\text{ MHz}$

Notes: 1. The 2SD468 is grouped by h_{FE} as follows.
2. Pulse test

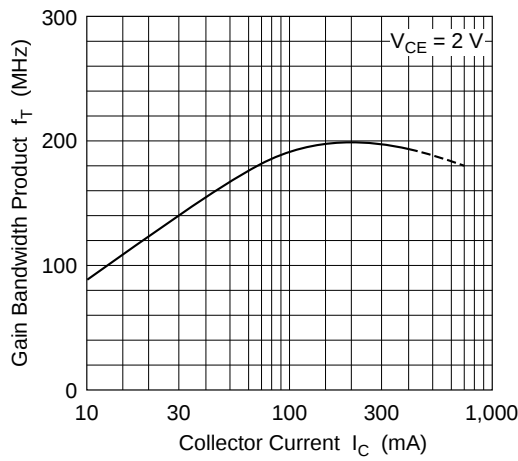
B	C
85 to170	120 to 240



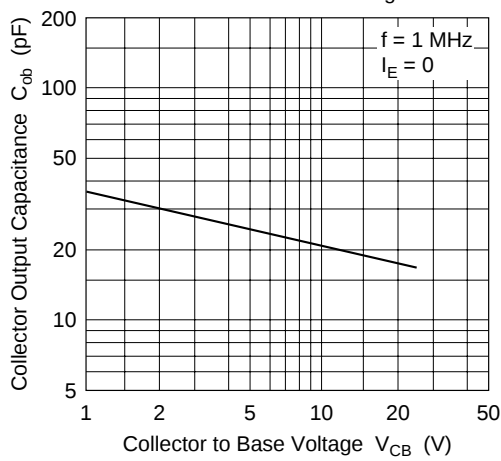
Collector to Emitter Saturation Voltage vs. Collector Current

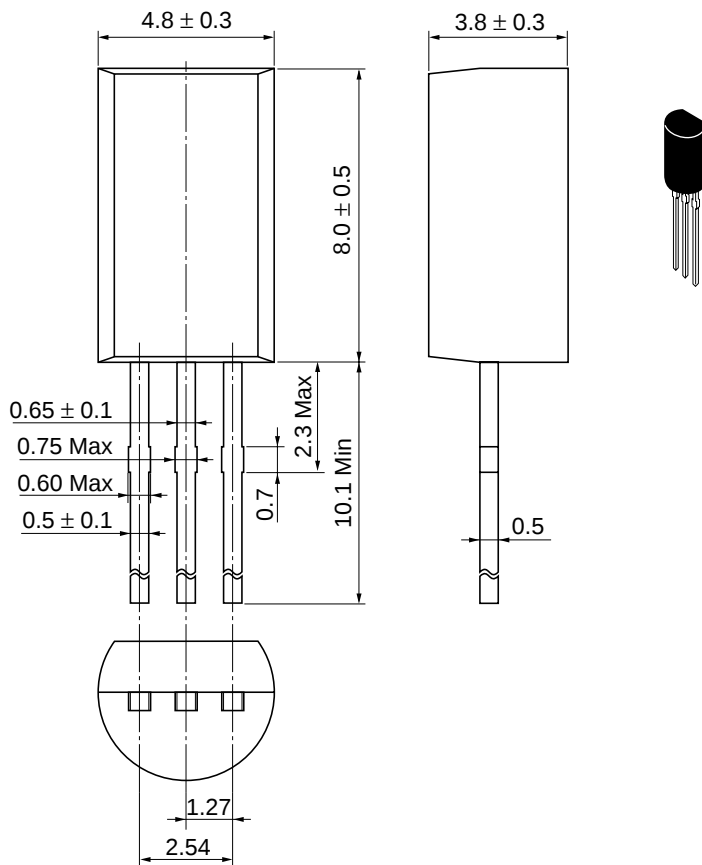


Gain Bandwidth Product vs. Collector Current



Collector Output Capacitance vs. Collector to Base Voltage





Hitachi Code	TO-92 Mod
JEDEC	—
EIAJ	Conforms
Weight (reference value)	0.35 g

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