2SA1468

Silicon PNP Epitaxial

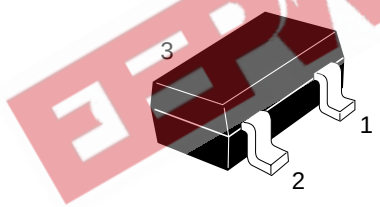
HITACHI

Application

High voltage amplifier

Outline

MPAK



1. Emitter
2. Base
3. Collector

Hitachi semiconductor

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	–180	V
Collector to emitter voltage	V_{CEO}	–180	V
Emitter to base voltage	V_{EBO}	–5	V
Collector current	I_C	–100	mA
Collector power dissipation	P_C	150	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	–55 to +150	°C

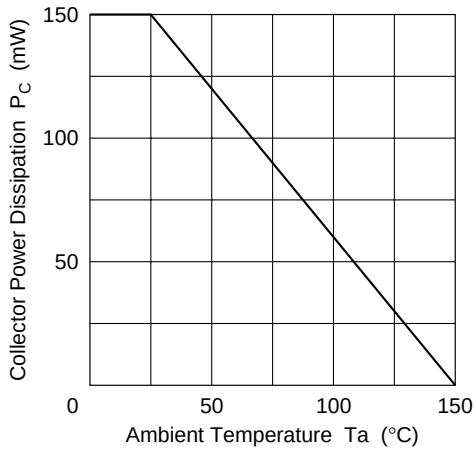
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	–180	—	—	V	I_C = –10 µA, I_E = 0
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	–180	—	—	V	I_C = –0.5 mA, R_{BE} = ∞
Emitter to base breakdown voltage	$V_{(BR)EBO}$	–5	—	—	V	I_E = –10 µA, I_C = 0
DC current transfer ratio	h_{FE}*1	100	—	320		V_{CE} = –12 V, I_C = –2 mA*2
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	–0.5	V	I_C = –30 mA, I_B = –3 mA*2
Base to emitter voltage	V_{BE}	—	—	–1.0	V	V_{CE} = –12 V, I_C = –2 mA
Gain bandwidth product	f_T	—	200	—	MHz	V_{CE} = –12 V, I_C = –10 mA
Collector output capacitance	Cob	—	3.5	—	pF	V_{CB} = –10 V, I_E = 0, f = 1 MHz

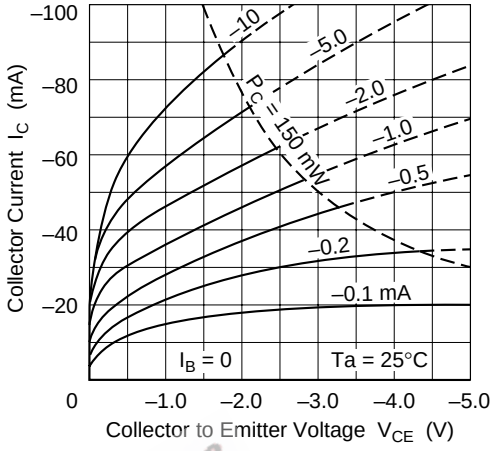
Notes: 1. The 2SA1468 is grouped by h_{FE} as follows.
2. Pulse test

Grade	B	C
Mark	INB	INC
h_{FE}	100 to 200	160 to 320

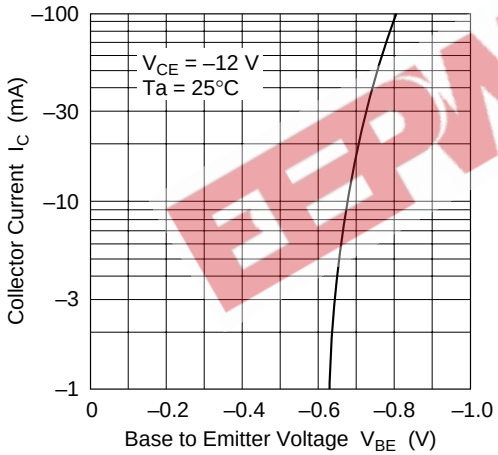
Maximum Collector Dissipation Curve



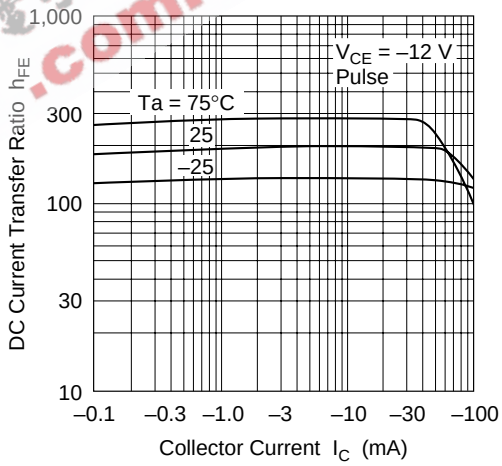
Typical Output Characteristics



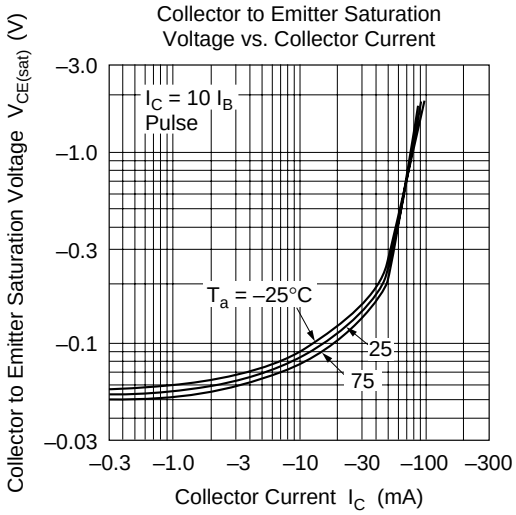
Typical Transfer Characteristics



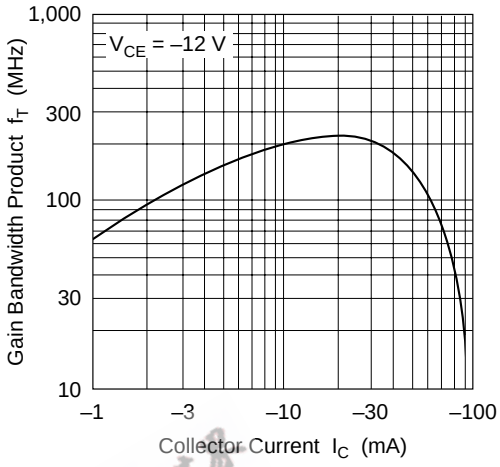
DC Current Transfer Ratio vs. Collector Current



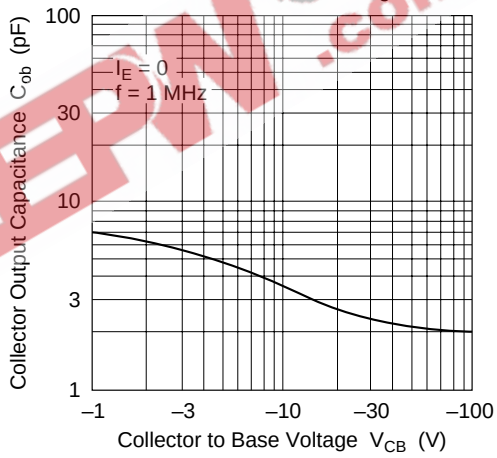
Collector to Emitter Saturation Voltage vs. Collector Current



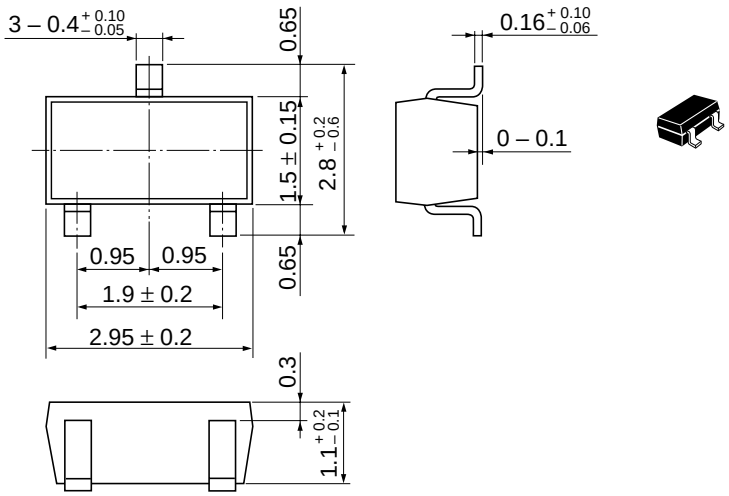
Gain Bandwidth Product vs. Collector Current



Collector Output Capacitance vs. Collector to Base Voltage



Unit: mm



Hitachi Code	MPAK
JEDEC	—
EIAJ	Conforms
Weight (reference value)	0.011 g

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