
2SC3390

Silicon NPN Epitaxial

HITACHI

Application

- Low frequency low noise amplifier
- HF amplifier

Outline

SPAK



1. Emitter
2. Collector
3. Base

2SC3390

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V _{CBO}	55	V
Collector to emitter voltage	V _{CEO}	50	V
Emitter to base voltage	V _{EBO}	5	V
Collector current	I _C	100	mA
Collector power dissipation	P _C	300	mW
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

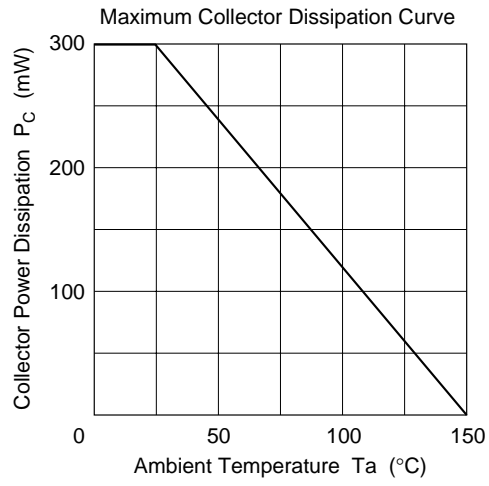
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	V _{(BR)CBO}	55	—	—	V	I _C = 10 μA, I _E = 0
Collector to emitter breakdown voltage	V _{(BR)CEO}	50	—	—	V	I _C = 1 mA, R _{BE} = ∞
Emitter to base breakdown voltage	V _{(BR)EBO}	5	—	—	V	I _E = 10 μA, I _C = 0
Collector cutoff current	I _{CBO}	—	—	0.5	μA	V _{CB} = 18 V, I _E = 0
Emitter cutoff current	I _{EBO}	—	—	0.5	μA	V _{EB} = 2 V, I _C = 0
DC current transfer ratio	h _{FE} ^{*1}	100	—	320		V _{CE} = 12 V, I _C = 2 mA
Base to emitter voltage	V _{BE}	—	—	0.75	V	V _{CE} = 12 V, I _C = 2 mA
Collector to emitter saturation voltage	V _{CE(sat)}	—	—	0.2	V	I _C = 10 mA, I _B = 1 mA
Gain bandwidth product	f _T	—	200	—	MHz	V _{CE} = 12 V, I _C = 2 mA
Collector output capacitance	C _{ob}	—	—	3.5	pF	V _{CB} = 10 V, I _E = 0, f = 1 MHz
Noise figure	NF	—	1.0	5.0	dB	V _{CE} = 6 V, I _C = 0.1 mA, R _g = 1 kΩ, f = 1 kHz

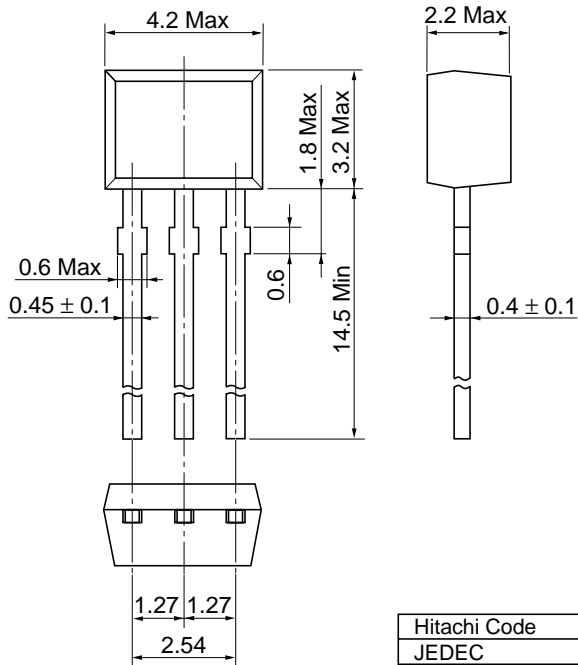
Note: 1. The 2SC3390 is grouped by h_{FE} as follows.

B	C
100 to 200	160 to 320

See characteristic curves of 2SC458(LG).



Unit: mm



Hitachi Code	SPAK
JEDEC	—
EIAJ	—
Weight (reference value)	0.10 g

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