# 2SA1566

# Silicon PNP Epitaxial

# **HITACHI**

## **Application**

Low frequency amplifier

#### Outline

MPAK

3
1. Emitter
2. Base
3. Collector



# **2SA1566**

# **Absolute Maximum Ratings** $(Ta = 25^{\circ}C)$

Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{\text{CBO}}$	-120	V
Collector to emitter voltage	V <sub>CEO</sub>	-120	V
Emitter to base voltage	$V_{EBO}$	<b>-</b> 5	V
Collector current	I <sub>c</sub>	-100	mA
Collector power dissipation	P <sub>c</sub>	150	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

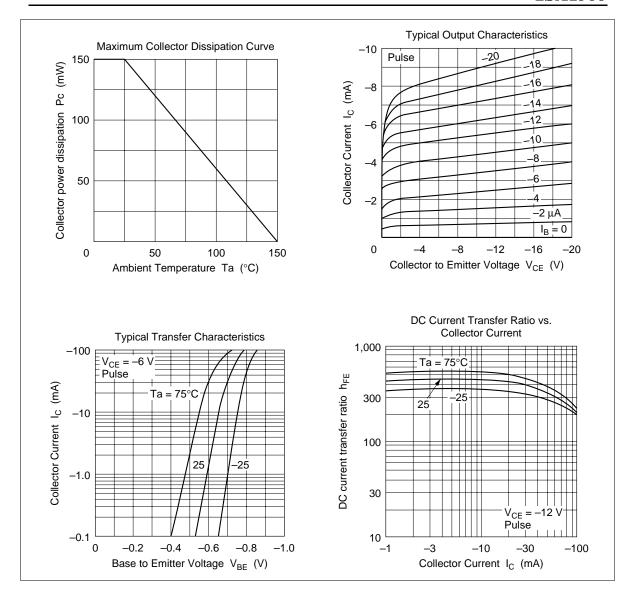
### **Electrical Characteristics** ( $Ta = 25^{\circ}C$ )

Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-120	-	_	V	$I_{c} = -10 \ \mu A, \ I_{E} = 0$
Collector to emitter breakdown voltage	$V_{\text{(BR)CEO}}$	-120	_	_	V	$I_C = -1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	<b>-</b> 5	_	_	V	$I_E = -10 \ \mu A, \ I_C = 0$
Collector cutoff current	I <sub>CBO</sub>	_	_	-0.1	μΑ	$V_{CB} = -70 \text{ V}, I_{E} = 0$
Emitter cutoff current	$\mathbf{I}_{EBO}$	_	_	-0.1	μΑ	$V_{EB} = -2 \text{ V}, I_{C} = 0$
DC current transfer ratio	$h_{\rm FE}^{*^1}$	250	_	800		$V_{CE} = -12 \text{ V}, I_{C} = -2 \text{ mA}^{*2}$
Collector to emitter saturation voltage	$V_{\text{CE(sat)}}$	_	_	-0.15	V	$I_{\rm C} = -10 \text{ mA}, I_{\rm B} = -1 \text{ mA}^{*2}$
Base to emitter voltage	$V_{BE(sat)}$	_	_	-1.0	V	$I_{\rm C} = -10 \text{ mA}, I_{\rm B} = -1 \text{ mA}^{*2}$

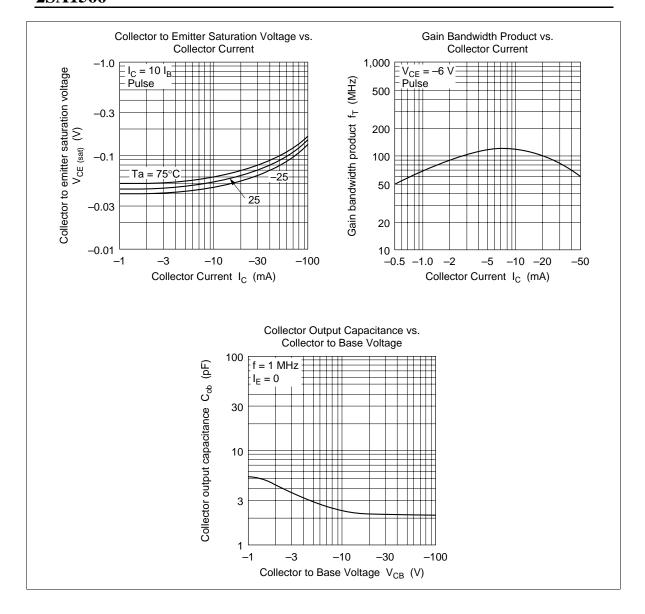
Notes: 1. The 2SA1566 is grouped by h<sub>FE</sub> as follows.

2. Pulse test

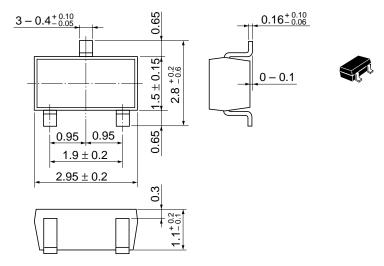
Grade	D	E
Mark	JID	JIE
h <sub>FE</sub>	250 to 500	400 to 800



# 2SA1566



#### Unit: mm



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

#### **Cautions**

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