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# 2SA1484

Silicon PNP Epitaxial

# HITACHI

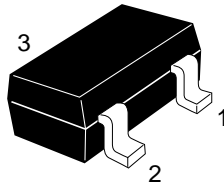
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## Application

Low frequency amplifier

## Outline

MPAK



- 1. Emitter
- 2. Base
- 3. Collector

**Absolute Maximum Ratings** ( $T_a = 25^\circ\text{C}$ )

Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{\text{CBO}}$	-90	V
Collector to emitter voltage	$V_{\text{CEO}}$	-90	V
Emitter to base voltage	$V_{\text{EBO}}$	-5	V
Collector current	$I_{\text{C}}$	-100	mA
Collector power dissipation	$P_{\text{C}}$	150	mW
Junction temperature	$T_{\text{j}}$	150	$^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$	-55 to +150	$^\circ\text{C}$

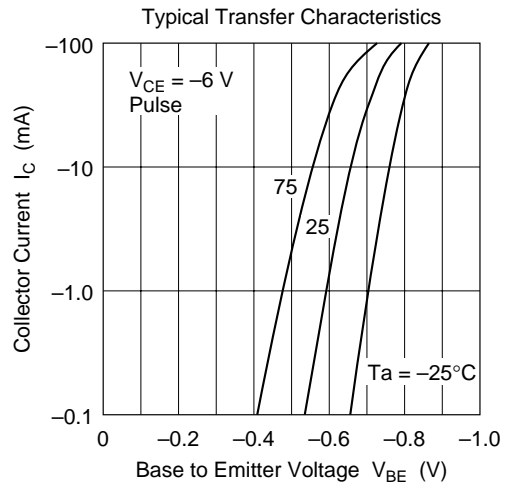
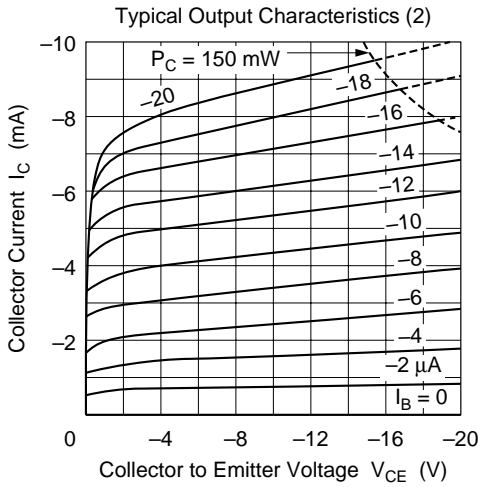
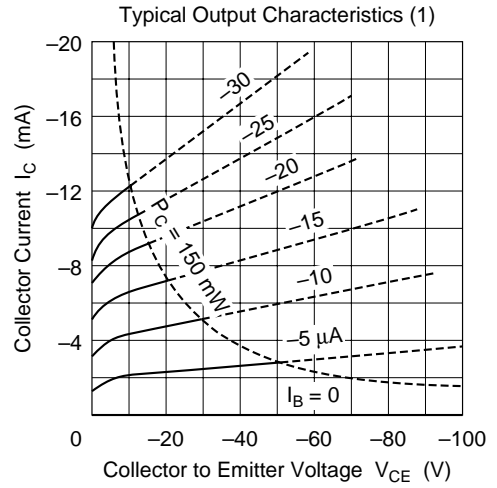
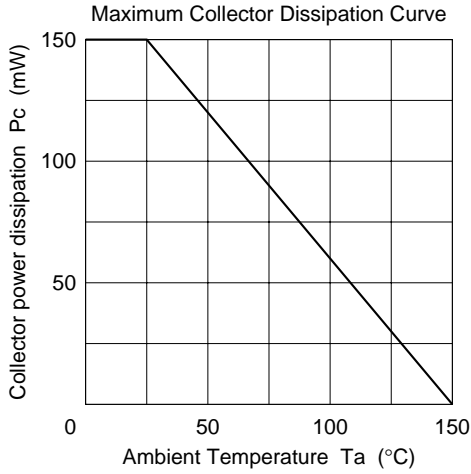
**Electrical Characteristics** ( $T_a = 25^\circ\text{C}$ )

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	-90	—	—	V	$I_{\text{C}} = -10 \mu\text{A}$ , $I_{\text{E}} = 0$
Collector to emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	-90	—	—	V	$I_{\text{C}} = -1 \text{ mA}$ , $R_{\text{BE}} = \infty$
Emitter to base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	-5	—	—	V	$I_{\text{E}} = -10 \mu\text{A}$ , $I_{\text{C}} = 0$
Collector cutoff current	$I_{\text{CBO}}$	—	—	-0.1	$\mu\text{A}$	$V_{\text{CB}} = -70 \text{ V}$ , $I_{\text{E}} = 0$
Emitter cutoff current	$I_{\text{EBO}}$	—	—	-0.1	$\mu\text{A}$	$V_{\text{EB}} = -2 \text{ V}$ , $I_{\text{C}} = 0$
DC current transfer ratio	$h_{\text{FE}}^{*1}$	250	—	800		$V_{\text{CE}} = -12 \text{ V}$ , $I_{\text{C}} = -2 \text{ mA}^{*2}$
Collector to emitter saturation voltage	$V_{\text{CE}(\text{sat})}$	—	—	-0.15	V	$I_{\text{C}} = -10 \text{ mA}$ , $I_{\text{B}} = -1 \text{ mA}^{*2}$
Base to emitter saturation voltage	$V_{\text{BE}(\text{sat})}$	—	—	-1.0	V	$I_{\text{C}} = -10 \text{ mA}$ , $I_{\text{B}} = -1 \text{ mA}^{*2}$

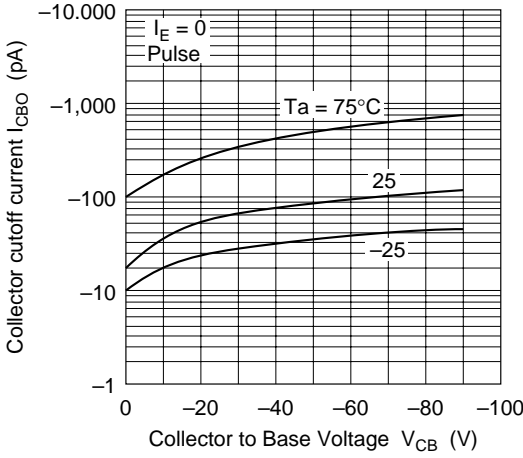
Notes: 1. The 2SA1484 is grouped by  $h_{\text{FE}}$  as follows.

2. Pulse test

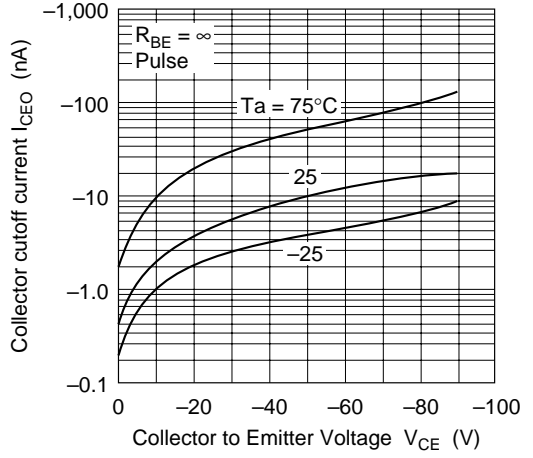
Grade	D	E
Mark	IRD	IRE
$h_{\text{FE}}$	250 to 500	400 to 800



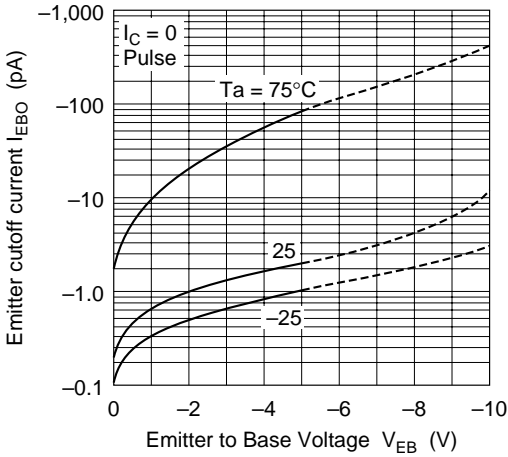
Collector Cutoff Current vs. Collector to Base Voltage



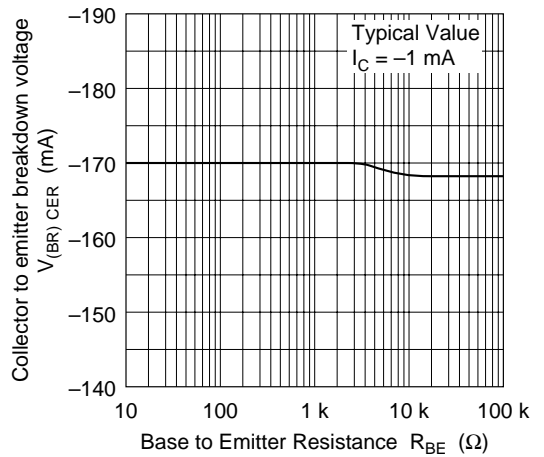
Collector Cutoff Current vs. Collector to Emitter Voltage



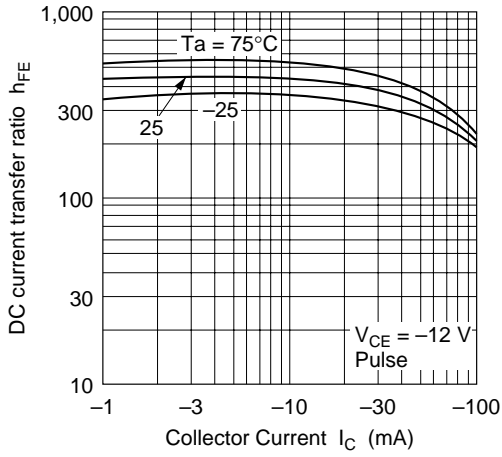
Emitter Cutoff Current vs. Emitter to Base Voltage



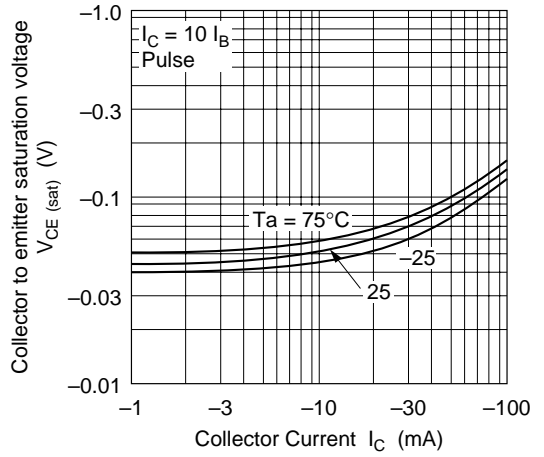
Collector to Emitter Breakdown Voltage vs. Base to Emitter Resistance



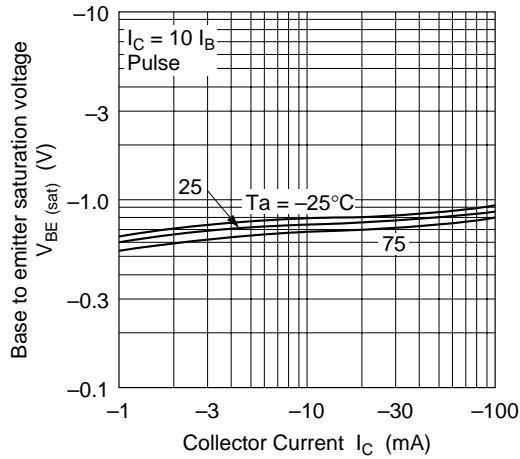
DC Current Transfer Ratio vs. Collector Current

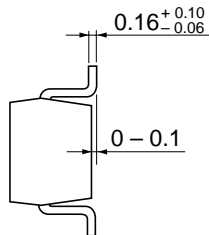
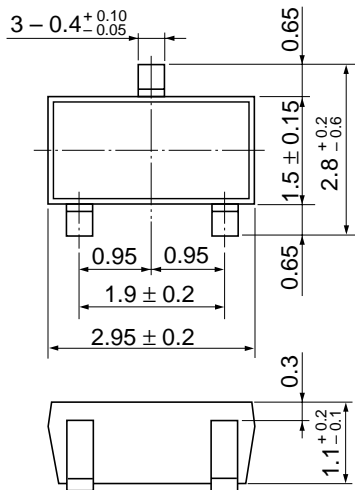


Collector to Emitter Saturation Voltage vs. Collector Current



Base to Emitter Saturation Voltage vs. Collector Current





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

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