2SC1214

Silicon NPN Epitaxial

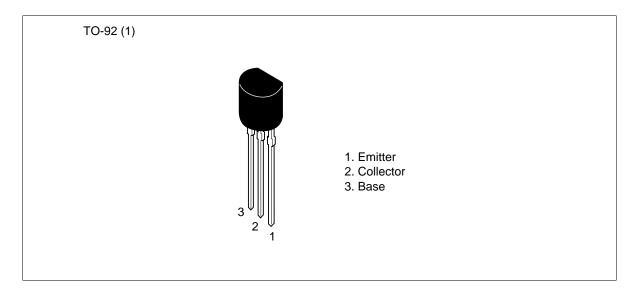
HITACHI

ADE-208-1050 (Z) 1st. Edition Mar. 2001

Application

Low frequency amplifier

Outline





2SC1214

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

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	50	V
Collector to emitter voltage	V _{CEO}	50	V
Emitter to base voltage	V_{EBO}	4	V
Collector current	I _c	500	mA
Collector power dissipation	P _c	600	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

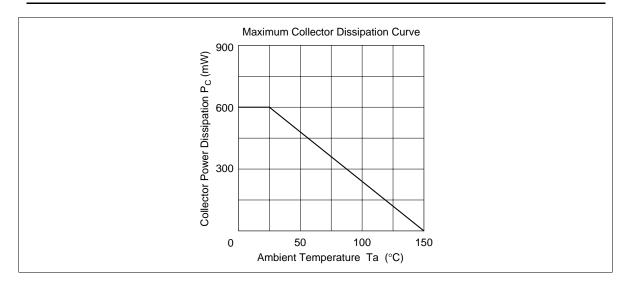
Electrical Characteristics ($Ta = 25^{\circ}C$)

Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	50	_	_	V	$I_{c} = 10 \ \mu A, \ I_{E} = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	50	_	_	V	I_{C} = 1 mA, R_{BE} = ∞
Emitter to base breakdown voltage	$V_{(BR)EBO}$	4	_	_	V	$I_{E} = 10 \ \mu A, \ I_{C} = 0$
Collector cutoff current	I _{CBO}	_	_	0.5	μΑ	$V_{CB} = 20 \text{ V}, I_{E} = 0$
DC current transfer ratio	h _{FE} *	60	_	320		$V_{CE} = 3 \text{ V}, I_{C} = 10 \text{ mA}$
	h _{FE}	10	_	_		$V_{CE} = 3 \text{ V}, I_{C} = 500 \text{ mA}$ (pulse test)
Collector to emitter saturation voltage	$V_{\text{CE(sat)}}$	_	0.2	0.6	V	$I_{\rm C}$ = 150 mA, $I_{\rm B}$ = 15 mA (Pulse test)
Base to emitter voltage	V_{BE}	_	0.64	_	V	$V_{CE} = 3 \text{ V}, I_{C} = 10 \text{ mA}$

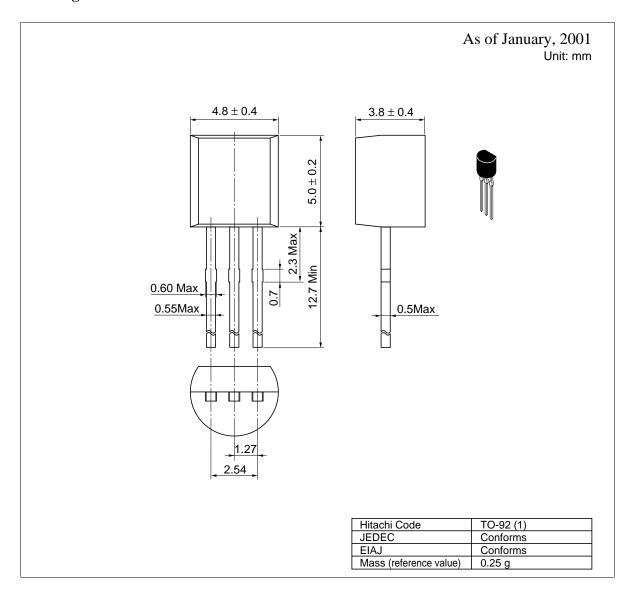
Note: 1. The 2SC1214 is grouped by h_{FE} as follows.

В	С	D
60 to 120	100 to 200	160 to 320

See characteristic curves of 2SC1213.



Package Dimensions



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