2SC3836

Silicon NPN Epitaxial

HITACHI

Application

Low frequency amplifier, switching

Outline

SPAK



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



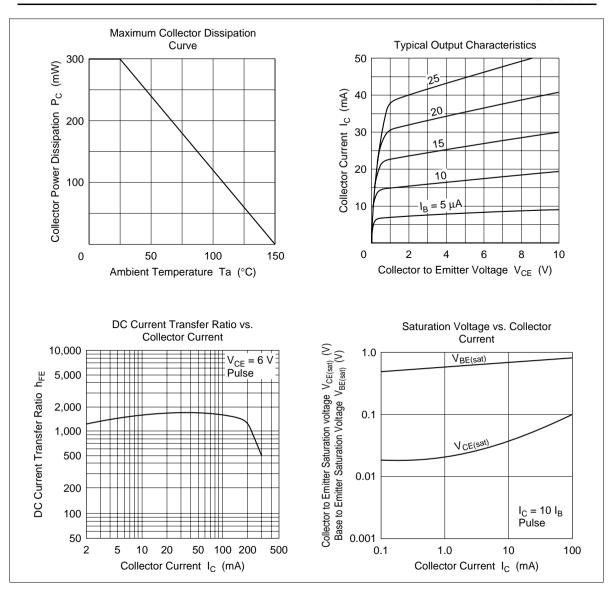
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Absolute Maximum Ratings ($Ta = 25^{\circ}C$)

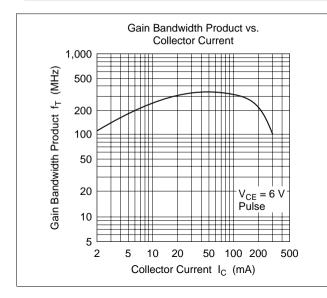
Item	Symbol	Ratings	Unit
Collector to base voltage	V _{CBO}	60	V
Collector to emitter voltage	V _{CEO}	50	V
Emitter to base voltage	V_{EBO}	15	V
Collector current	Ic	300	mA
Collector power dissipation	P _c	300	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

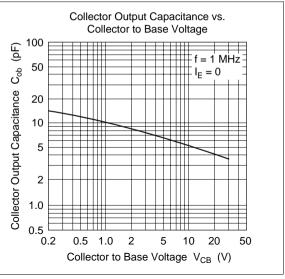
Electrical Characteristics ($Ta = 25^{\circ}C$)

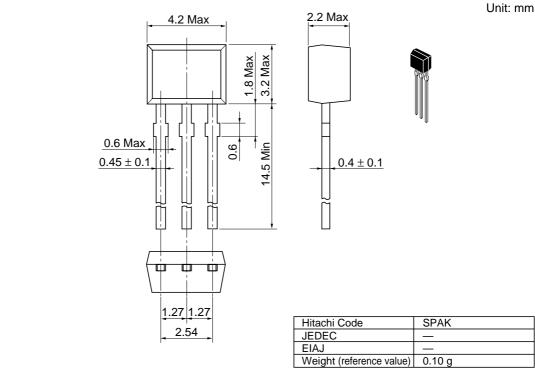
Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{\text{(BR)CBO}}$	60	_	_	V	$I_{c} = 10 \ \mu A, \ I_{E} = 0$
Collector to emitter breakdown voltage	$V_{\text{(BR)CEO}}$	50	_	_	V	$I_{C} = 1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{\text{(BE)EBO}}$	15	_	_	V	$I_{E} = 10 \mu A, I_{C} = 0$
Collector cutoff current	I _{CBO}	_	_	1	μΑ	$V_{CB} = 50 \text{ V}, I_{E} = 0$
Base to emitter voltage	V_{BE}	_	_	0.75	V	$V_{CE} = 6 \text{ V}, I_{C} = 1 \text{ mA}$
DC current transfer ratio	h _{FE1}	800	_	2000		$V_{CE} = 6 \text{ V}, I_{C} = 100 \text{ mA}$ (pulse test)
	h _{FE2}	500		_		$V_{CE} = 6 \text{ V}, I_{C} = 1 \text{ mA}$
Collector to emitter saturation voltage	$V_{\text{CE(sat)}}$	_	_	0.3	V	$I_{\rm C}$ = 300 mA, $I_{\rm B}$ = 30 mA (pulse test)



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