

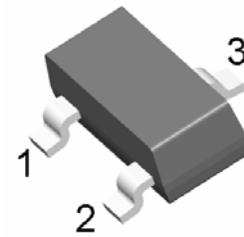
## General Purpose Transistors 通用三極管

## FHT1298

### DESCRIPTION & FEATURES 概述及特點

Suitable for Driver Stage of Small Motor 小馬達驅動  
 Complementary to FHT3265 與 FHT3265 互補

SOT-23



### PIN ASSIGNMENT 引腳說明

PIN NAME 管腳符號	PIN NUMBER 引腳序號	FUNCTION 功能
	SOT-23	
B	1	BASE
E	2	EMITTER
C	3	COLLECTOR

### MAXIMUM RATINGS(T<sub>a</sub>=25°C) 最大額定值

CHARACTERISTIC 特性參數	Symbol 符號	Rating 額定值	Unit 單位
Collector-Base Voltage 集電極-基極電壓	V <sub>CBO</sub>	-35	Vdc
Collector-Emitter Voltage 集電極-發射極電壓	V <sub>CEO</sub>	-30	Vdc
Emitter-Base Voltage 發射極-基極電壓	V <sub>EBO</sub>	-5.0	Vdc
Collector Current—Continuous 集電極電流-連續	I <sub>C</sub>	-800	mAdc
Base Current 基極電流	I <sub>B</sub>	-160	mAdc

### THERMAL CHARACTERISTICS 熱特性

CHARACTERISTIC 特性參數	Symbol 符號	Max 最大值	Unit 單位
Collector Power Dissipation 集電極耗散功率	P <sub>c</sub>	300	mW
Junction and Storage Temperature 結溫和儲存溫度	T <sub>j</sub> , T <sub>stg</sub>	150 , -55 ~150	°C

### DEVICE MARKING 打標

h<sub>FE</sub>(1) FHT1298O=IO(100~200), FHT1298Y=IY(160~320)

### ELECTRICAL CHARACTERISTICS 電特性

(T<sub>A</sub>=25°C unless otherwise noted 如無特殊說明，溫度為 25°C)

Characteristic 特性參數	Symbol 符號	Test Condition 測試條件	Min 最小值	Type 典型值	Max 最大值	Unit 單位
Collector Cutoff Current 集電極截止電流	I <sub>CBO</sub>	V <sub>CB</sub> =-30V, I <sub>E</sub> =0	—	—	-0.1	μA
Emitter Cutoff Current 發射極截止電流	I <sub>EBO</sub>	V <sub>EB</sub> =-5V, I <sub>C</sub> =0	—	—	-0.1	μA
Collector-Emitter Breakdown Voltage 集電極-發射極擊穿電壓	V <sub>(BR)CEO</sub>	I <sub>C</sub> =-10mA	-30	—	—	V
Collector-Base Breakdown Voltage 集電極-基極擊穿電壓	V <sub>(BR)CBO</sub>	I <sub>C</sub> =-100μA	-35	—	—	V
Emitter-Base Breakdown Voltage 發射極-基極擊穿電壓	V <sub>(BR)EBO</sub>	I <sub>E</sub> =-1mA	-5	—	—	V
DC Current Gain 直流電流增益	h <sub>FE</sub> (1)	V <sub>CE</sub> =-1V, I <sub>C</sub> =-100mA	100	—	320	—
	h <sub>FE</sub> (2)	V <sub>CE</sub> =-1V, I <sub>C</sub> =-800mA	40	—	—	
Collector-Emitter Saturation Voltage 集電極-發射極飽和壓降	V <sub>CE(sat)</sub>	I <sub>C</sub> =-500mA, I <sub>B</sub> =-20mA	—	—	-0.4	V
Base-Emitter Voltage 基極-發射極電壓	V <sub>BE</sub>	V <sub>CE</sub> =-1V, I <sub>C</sub> =-10mA	-0.5	—	-0.8	V
Transition Frequency 特徵頻率	f <sub>T</sub>	V <sub>CE</sub> =-5V, I <sub>C</sub> =-10mA	—	120	—	MHz
Collector Output Capacitance 輸出電容	C <sub>ob</sub>	V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=1MHz	—	13	—	pF