

功率三極管
PNP SILICON POWER Transistor

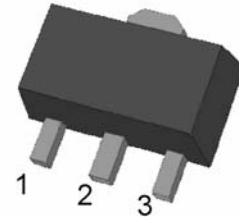
PNP SILICON POWER Transistor 功率三極管

FHB772

DESCRIPTION & FEATURES 概述及特點

- Low saturation voltage
 $V_{CE(sat0)} < 0.5V (@ I_C = -2A, I_B = -0.2A)$
- Excellent HFE linearity and high HFE
HFE: 60 to 400 ($V_{CE} = -2V, I_C = -1A$)

SOT-89



PIN ASSIGNMENT 引腳說明

PIN NAME 管腳符號	PIN NUMBER 引腳序號	FUNCTION 功能
	SOT-89	
B	1	BASE
C	2	COLLECTOR
E	3	EMITTER

MAXIMUM RATINGS ($T_a = 25^\circ C$) 最大額定值

CHARACTERISTIC 特性參數	Symbol 符號	Rating 額定值	Unit 單位
Collector-Emitter Voltage 集電極-發射極電壓	V_{CEO}	-30	Vdc
Collector-Base Voltage 集電極-基極電壓	V_{CBO}	-40	Vdc
Emitter-Base Voltage 發射極-基極電壓	V_{EBO}	-5	Vdc
Collector Current(DC) 集電極電流-直流	I_C	-3	Adc
Collector Current(Pulse) 集電極電流-脈衝	I_{CP}	-7	Adc
Total Power Dissipation 耗散功率 ($T_a = 25^\circ C$)	P_{tot}	1.0	W
Junction and Storage Temperature 結溫 and 儲存溫度	T_J T_{stg}	150 , -55 ~ 150	$^\circ C$

DEVICE MARKING 打標

FHB772R=BR(60~120), FHB772Q=BQ(100~200), FHB772P=BP(160~320), FHB772E=BE(200~400)

ELECTRICAL CHARACTERISTICS 電特性

($T_a = 25^\circ C$ unless otherwise noted 如無特殊說明，溫度為 $25^\circ C$)

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-Emitter Breakdown Voltage 集電極-發射極擊穿電壓	$V_{(BR)CEO}$	$I_C = -10mA$,	-30	—	—	
Collector-Base Breakdown Voltage 集電極-基極擊穿電壓	$V_{(BR)CBO}$	$I_C = -100\mu A$	-40	—	—	
Emitter-Base Breakdown Voltage 發射極-基極擊穿電壓	$V_{(BR)EBO}$	$I_E = -100\mu A$	-5.0	—	—	
Collector Cutoff Current 集電極截止電流	I_{CBO}	$V_{CB} = -30V, I_E = 0$	—	—	-1.0	μA
Emitter Cutoff Current 發射極截止電流	I_{EBO}	$V_{EB} = -3V, I_C = 0$	—	—	-1.0	μA
DC Current Gain 直流電流增益	h_{FE}	$V_{CE} = -2V, I_C = -20mA$	30	220	—	—
		$V_{CE} = -2V, I_C = -1A$	60	160	400	—
Collector-Emitter Saturation Voltage 集電極-發射極飽和壓降	$V_{CE(sat)}$	$I_C = -2A, I_B = -200mA$	—	-0.3	-0.5	V
Base-Emitter Saturation Voltage 基極-發射極飽和壓降	$V_{BE(sat)}$	$I_C = -2A, I_B = -200mA$	—	-1	-2	V
Transition Frequency 特徵頻率	f_T	$V_{CE} = -5V, I_E = -0.1A$,	—	80	—	MHz
Collect Output Capacitance 輸出電容	C_{Ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$	—	55	—	pF