

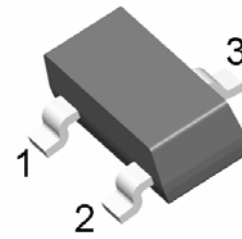
General Purpose Transistors 通用三极管

FHT1504

DESCRIPTION & FEATURES 概述及特点

Excellent  $h_{FE}$  Linearity  $h_{FE}$  线性特性极好  
 $h_{FE}(0.1mA) / h_{FE}(2mA) = 0.95$  (Typ.)  
 Low Noise 低杂讯:  $NF = 1dB$  (Typ.),  $10dB$  (Max.)  
 Complementary to FHT3875 与 FH3875 互补

SOT-23



PIN ASSIGNMENT 引脚说明

PIN NAME 管脚符号	PIN NUMBER SOT-23 引脚序号	FUNCTION 功能
B	1	BASE
E	2	EMITTER
C	3	COLLECTOR

MAXIMUM RATINGS ( $T_a = 25^\circ C$ ) 最大额定值

CHARACTERISTIC 特性参数	Symbol 符号	Rating 额定值	Unit 单位
Collector-Emitter Voltage 集电极-发射极电压	$V_{CEO}$	-50	Vdc
Collector-Base Voltage 集电极-基极电压	$V_{CBO}$	-50	Vdc
Emitter-Base Voltage 发射极-基极电压	$V_{EBO}$	-5.0	Vdc
Collector Current—Continuous 集电极电流-连续	$I_C$	-150	mAdc
Base Current 基极电流	$I_B$	-30	mAdc

THERMAL CHARACTERISTICS 热特性

CHARACTERISTIC 特性参数	Symbol 符号	Max 最大值	Unit 单位
Collector Power Dissipation 集电极耗散功率	$P_C$	300	mW
Junction and Storage Temperature 结温和储存温度	$T_j,$ $T_{stg}$	150, -55 ~ 150	$^\circ C$

DEVICE MARKING 打标

$h_{FE}(1)$  FHT1504O=SO(70~140), FHT1504Y=SY(120~240), FHT1504G=SG(200~400)

ELECTRICAL CHARACTERISTICS 电特性

( $T_a = 25^\circ C$  unless otherwise noted 如无特殊说明, 温度为  $25^\circ C$ )

Characteristic 特性参数	Symbol 符号	Test Condition 测试条件	Min 最小值	Type 典型值	Max 最大值	Unit 单位
Collector Cutoff Current 集电极截止电流	$I_{CBO}$	$V_{CB} = -50V, I_E = 0$	—	—	-0.1	$\mu A$
Emitter Cutoff Current 发射极截止电流	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$	—	—	-0.1	$\mu A$
Collector-Emitter Breakdown Voltage 集电极-发射极击穿电压	$V_{(BR)CEO}$	$I_C = -1.0mA$	-50	—	—	V
Collector-Base Breakdown Voltage 集电极-基极击穿电压	$V_{(BR)CBO}$	$I_C = -100\mu A$	-50	—	—	V
Emitter-Base Breakdown Voltage 发射极-基极击穿电压	$V_{(BR)EBO}$	$I_E = -100\mu A$	-5	—	—	V
DC Current Gain 直流电流增益	$h_{FE}$	$V_{CE} = -6V, I_C = -2mA$	70	—	400	—
Collector-Emitter Saturation Voltage 集电极-发射极饱和压降	$V_{CE(sat)}$	$I_C = -100mA, I_B = -10mA$	—	—	-0.3	V
Base-Emitter Voltage 基极-发射极电压	$V_{BE}$	$V_{CE} = -5.0V, I_C = -10mA$	—	—	-0.82	V
Transition Frequency 特征频率	$f_T$	$V_{CE} = -5.0V, I_C = -10mA$	100	200	—	MHz
Collector Output Capacitance 输出电容	$C_{ob}$	$V_{CB} = -10V, I_E = 0,$ $f = 1MHz$	—	4.0	7.0	pF