SOT-23 Plastic-Encapsulate Transistors

TRANSISTOR (PNP)

SOT-23

1. Base
2.Emitter
3.Collector

FEATURES

Complimentary to SS8050

MARKING: Y2

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-1.5	A
P_C	Collector Power Dissipation	0.3	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA, I_E=0	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-0.1mA, I_B=0	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA, I_C=0	-5		V
Collector cut-off current	I_{CBO}	V_{CB}=-40V, I_E=0		-0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}=-20V, I_B=0		-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V, I_C=0		-0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-1V, I_C=-100mA	120	400	
	$h_{FE(2)}$	V_{CE}=-1V, I_C=-800mA	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-800mA, I_B=-80mA		-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-800mA, I_B=-80mA		-1.2	V
Base-emitter on voltage	$V_{BE(on)}$	I_C=-1V,V_{CE}=-10mA		-1	V
Base-emitter positive favor voltage	V_{BEF}	I_B=-1A		-1.55	V
Transition frequency	f_T	V_{CE}= -10V, I_C= -50mA f=30MHz	100		MHz
output capacitance	C_{ob}	(V_{CB}=-10V,I_E=0,f=1MHz)		20	pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	L	H	J
Range	120-200	200-350	300-400

Typical Characteristics