SS8050 (NPN)

FEATURES

Complimentary to SS8550

Marking : Y1

1. BASE
2. EMITTER
3. COLLECTO

SOT-23

MAXIMUM RATINGS (TA=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current -Continuous	I_C	1500	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_J	150	℃
Storage Temperature	Tstg	-55 to +150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	I_C= 100μA, I_E=0	40			V
Collector-emitter breakdown voltage	V_{CEO}	I_C= 0.1mA, I_B=0	25			V
Emitter-base breakdown voltage	V_{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_{CB}=20V, I_E=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
Transition frequency	f_T	V_{CE}=10V, I_C= 50mA f=30MHz	100			MHz

CLASSIFICATION OF h_{FE}

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

SS8050 Typical Characteristics