

TRANSISTOR(NPN)

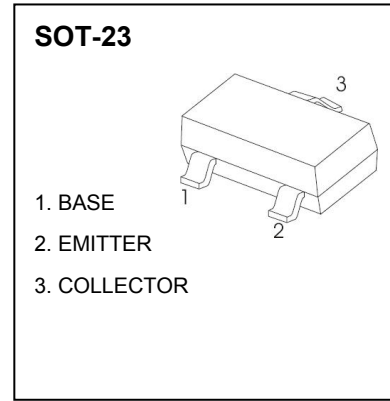
FEATURES

- Complimentary to S8050
- Collector current: $I_C=0.5A$

MARKING : 2TY

MAXIMUM RATINGS ($T_a=25^{\circ}C$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CB0}	Collector-Base Voltage	-40	V
V_{CE0}	Collector-Emitter Voltage	-25	V
V_{EB0}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.5	A
P_C	Collector Power Dissipation	0.3	W
T_j	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature	-55-150	$^{\circ}C$



ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CB0}$	$I_C = -100\mu A, I_E=0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CE0}$	$I_C = -1mA, I_B=0$	-25		V
Emitter-base breakdown voltage	$V_{(BR)EB0}$	$I_E = -100\mu A, I_C=0$	-5		V
Collector cut-off current	I_{CB0}	$V_{CB} = -40V, I_E=0$		-0.1	μA
Collector cut-off current	I_{CE0}	$V_{CE} = -20V, I_B=0$		-0.1	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = -3V, I_C=0$		-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -50mA$	120	400	
	$h_{FE(2)}$	$V_{CE} = -1V, I_C = -500mA$	50		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$		-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500mA, I_B = -50mA$		-1.2	V
Transition frequency	f_T	$V_{CE} = -6V, I_C = -20mA$ $f=30MHz$	150		MHZ
CLASSIFICATION OF $h_{FE(1)}$					
Rank	L		H		J
Range	120-200		200-350		300-400

Typical Characteristics

