

SOT-23


- 1. BASE
- 2. EMITTER
- 3. COLLECTOR

MARKING : 2TY
Features

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

Maximum Ratings

(Ratings at 25°C ambient temperature unless otherwise specified.)

Symbol	Parameter	Value	Units
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	°C
T_{stg}	Storage Temperature	-55-150	°C

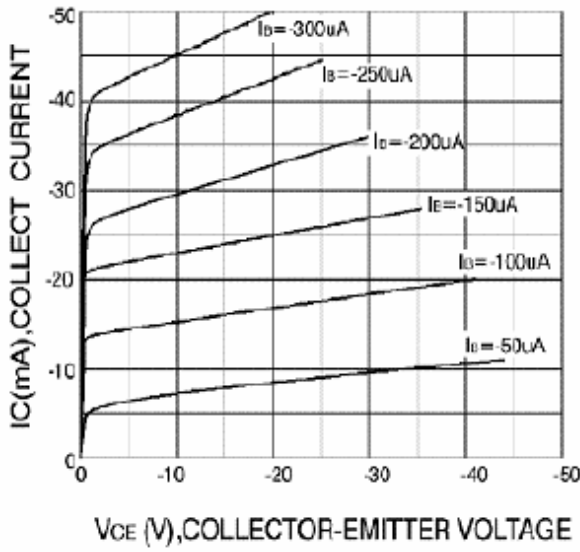
Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

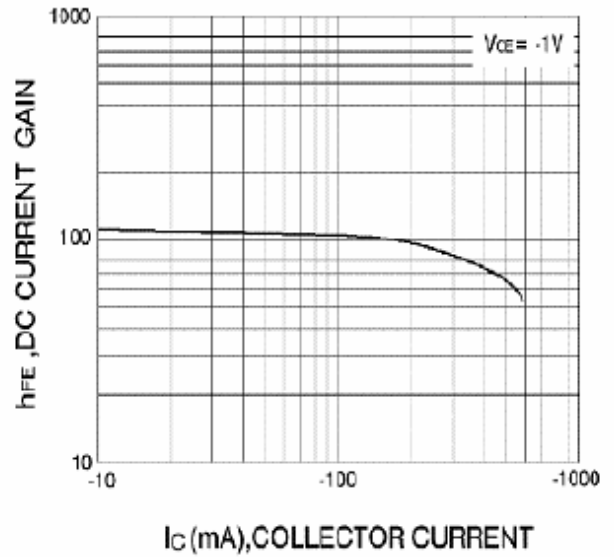
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CB0}$	$I_C = -100\mu A, I_E = 0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CE0}$	$I_C = -1mA, I_B = 0$	-25		V
Emitter-base breakdown voltage	$V_{(BR)EB0}$	$I_E = -100\mu A, I_C = 0$	-5		V
Collector cut-off current	I_{CB0}	$V_{CB} = -40V, I_E = 0$		-0.1	μA
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 $h_{FE(1)}$

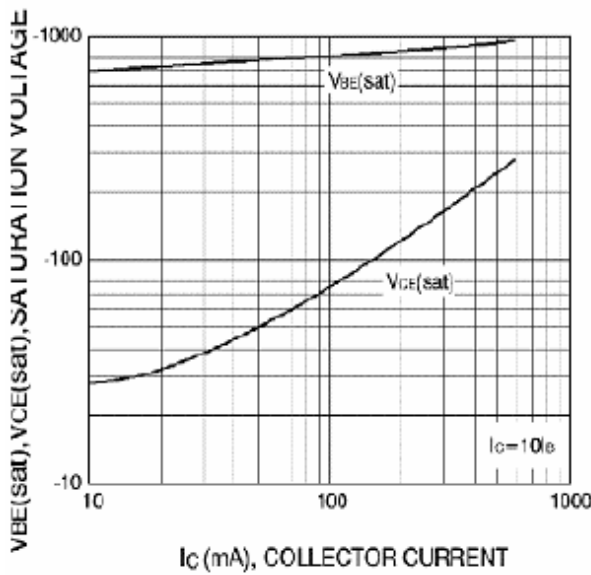
Rank	L	H
Range	120-200	200-350



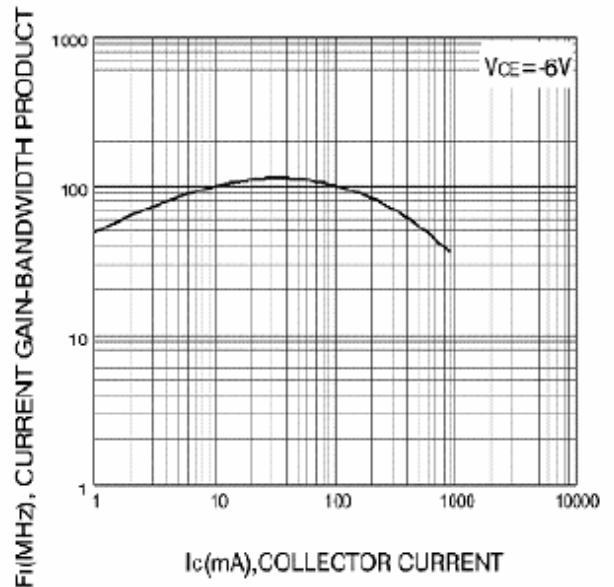
Static Characteristic



DC current Gain



Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage



Current Gain Bandwidth Product