

**SOT-23**


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

**MARKING : 2TY**
**Features**

- Complimentary to M8050
- Collector Current:  $I_c = 0.8A$

**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	-6	V
$I_c$	Collector Current -Continuous	-0.8	A
$P_c$	Collector Power Dissipation	0.2	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	Symbols	Test Condition	Limits		Unit
			Min	Max	
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-6		V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -35V, I_E = 0$		-100	nA
Collector cut-off current	$I_{CEO}$	$V_{CE} = -20V, I_B = 0$		-100	nA
DC current gain	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -5mA$	45		
	$h_{FE(2)}$	$V_{CE} = -1V, I_C = -100mA$	85	400	
	$h_{FE(3)}$	$V_{CE} = -1V, I_C = -800mA$	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -800mA, I_B = -80mA$		-0.50	V
Base -emitter saturation voltage	$V_{BE(sat)}$	$I_C = -800mA, I_B = -80mA$		-1.20	V
Transition frequency	$f_T$	$V_{CE} = -6V, I_C = -20mA, f = 30MHz$	150		MHz

**CLASSIFICATION OF  $h_{FE(2)}$** 

RANK	L	H
RANGE	85-300	300-400

