


SOT-23


1. BASE
2. EMITTER
3. COLLECTOR

MARKING: Y11
Features

- Complimentary to M8550
- Collector Current: $I_C=0.8A$

Maximum Ratings

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	0.8	A
P_C	Collector 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		
	$h_{FE(2)}$	$V_{CE}=1V, I_C=100mA$	80	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	80-300	300-400

Typical characteristics

