

SINLOON®

雙極型晶體管

SOT-23 M8050
NPN General Purpose Transistors

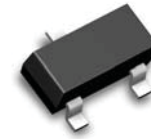
☐ **FEATURE:**

- ◆ Power Dissipation

☐ **MECHANICAL CHARACTERISTICS:**

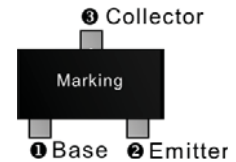
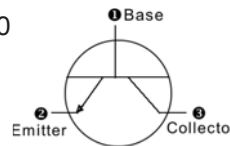
- ◆ Case: SOT-23 Molded Plastic
- ◆ Weight: 0.01 Grams (approx)
- ◆ Marking: Body top
- ◆ Terminals: Plated leads solderable per MIL-STD-202, Method 20
- ◆ Mounting: Position any

Figure



☐ **SOT-23 M8050**

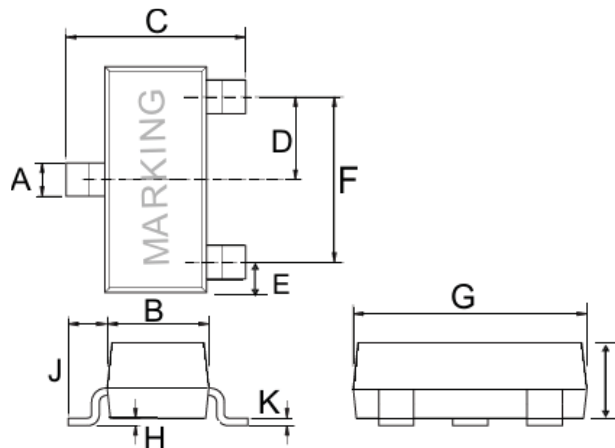
Top View



☐ **DIMENSION:**

mm

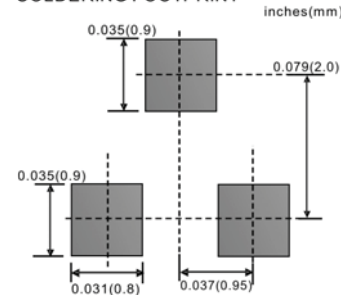
SOT-23		
Dim	Min	Max
A	0.37	0.51
B	1.19	1.4
C	2.1	2.5
D	0.89	1.05
E	0.45	0.61
F	1.78	2.05
G	2.65	3.05
H	0.013	0.15
I	0.89	1.1
J	0.45	0.61
K	0.076	0.178



☐ **Maximum Ratings** @ $T_A=25^{\circ}\text{C}$ unless otherwise noted

Parameter	Symbol	Value	Units
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	6.0	V
Collector Current - Continuous	I_C	0.8	A
Collector Power Dissipation	P_C	0.2	W
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-55~150	$^{\circ}\text{C}$

SOLDERING FOOTPRINT



☐ **Classification Of** $h_{FE(2)}$

Rank	L	H
Range:	80-200	200-300

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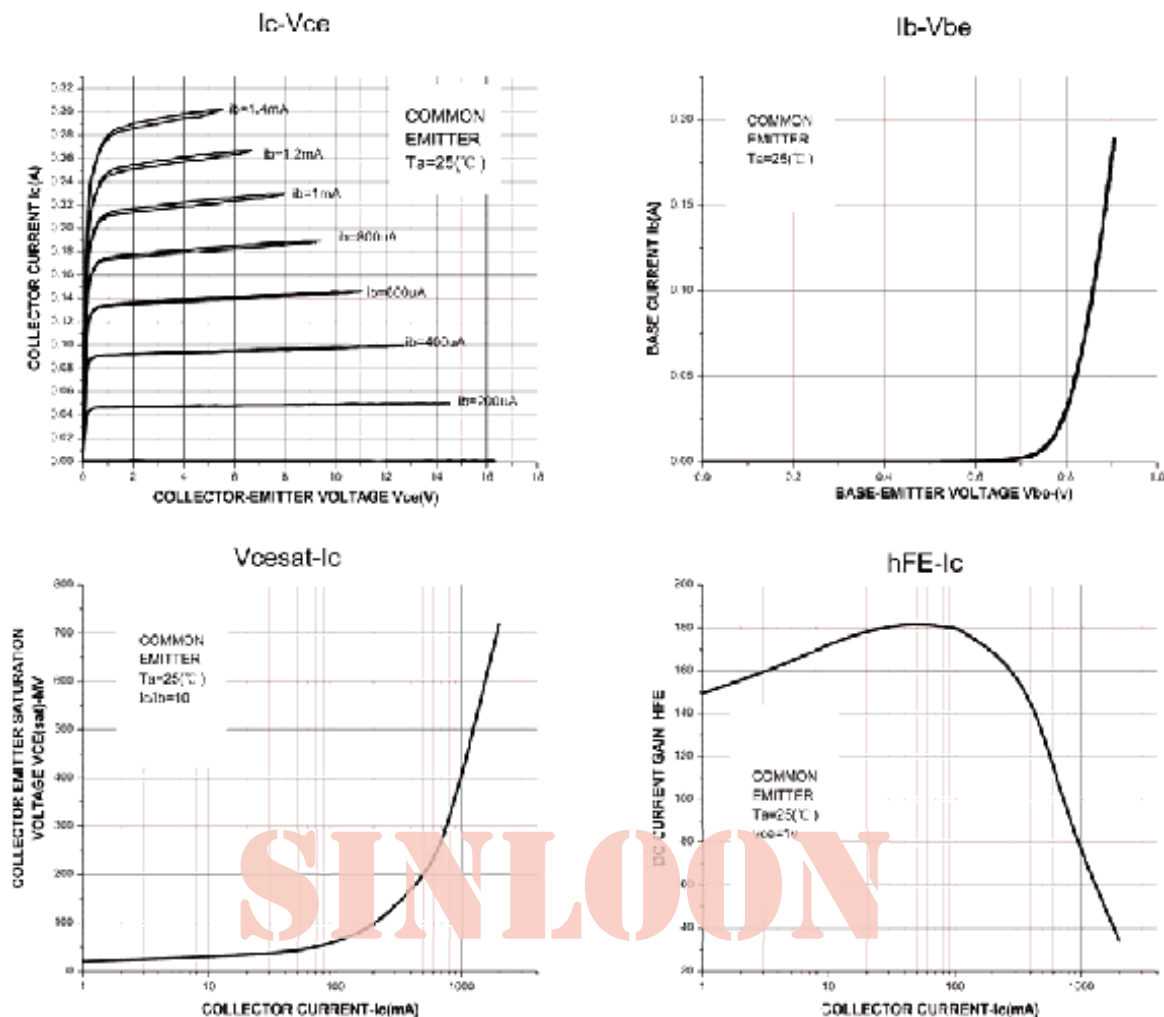
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□ **Electrical Characteristics** $T_{amb}=25^{\circ}\text{C}$ unless otherwise specified

Parameter	Symbol	Test Conditions	Min.	Max.	Unit
Collector-Base Breakdown voltage	$V(\text{BR})_{\text{CBO}}$	$I_{\text{C}}=100\mu\text{A}, I_{\text{E}}=0$	40	---	V
Collector-Emitter Breakdown voltage	$V(\text{BR})_{\text{CEO}}^*$	$I_{\text{C}}=1\text{mA}, I_{\text{B}}=0$	25	---	V
Emitter-Base Breakdown voltage	$V(\text{BR})_{\text{EBO}}$	$I_{\text{E}}=100\mu\text{A}, I_{\text{C}}=0$	6	---	V
Collector cut-off current	I_{CBO}	$V_{\text{CB}}=35\text{V}, I_{\text{E}}=0$	---	0.1	μA
	I_{CEO}	$V_{\text{CE}}=20\text{V}, I_{\text{B}}=0$	---	0.1	μA
DC Current gain	$h_{\text{FE}(1)}$	$V_{\text{CE}}=1\text{V}, I_{\text{C}}=50\text{mA}$	45	---	
	$h_{\text{FE}(2)}$	$V_{\text{CE}}=1\text{V}, I_{\text{C}}=100\text{mA}$	80	300	
	$h_{\text{FE}(3)}$	$V_{\text{CE}}=1\text{V}, I_{\text{C}}=800\text{mA}$	40	---	
Collector-emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_{\text{C}}=800\text{mA}, I_{\text{B}}=80\text{mA}$	---	0.5	V
Base-emitter saturation voltage	$V_{\text{BE(sat)}}$	$I_{\text{C}}=800\text{mA}, I_{\text{B}}=80\text{mA}$	---	1.2	V
Transition frequency	f_{T}	$V_{\text{CE}}=6\text{V}, I_{\text{C}}=200\text{mA}, f=30\text{MHz}$	150	---	MHz

* Pulse Test: Pulse width $\leq 300\mu\text{s}$, duty cycle $\leq 2\%$

Typical Characteristics M8050



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☐ **COMMON PACKING INFORMATION:**

Product Number:	Package Type	Packing Quantity	Carton Quantity	Apporx Gross Weight
M8050	SOT-23	3000 Tape & Reel	180,000 Ctn	12 Kg

Reel Diameter (Inch)	Quantity (Pcs)	Inner Box Size (mm)	Carton Size (mm)
7"	3000	L: 203 x W:203 x H:195	L:439 x W:438 x H:220

Plastic Reel : Fig-1



Reel Qty: 3000 Reel

Inner Box: Fig-2



Inner Box Qty: 45,000 PCS

Carton Pack Fig-3



Carton Qty: 180,000 PCS

美隆電子產品規格特性參數的改變或更新,將不會另行通知。

Mayloon characteristic parameters of electronic product specification changes or updates without prior notice。

