Elektronische Bauelemente

M8050

40V, 0.8A, 200mW

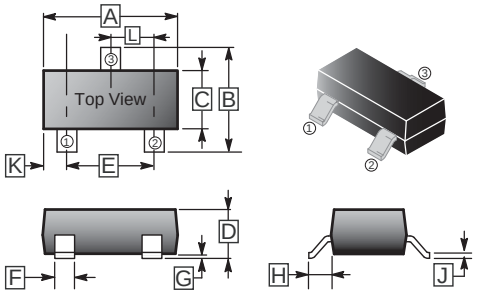
NPN Plastic Encapsulate Transistor

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

SOT-23

FEATURES

- Power dissipation



MARKING

Product	Marking Code
M8050	Y11

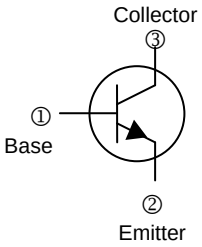
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	3.04	G	-	0.18
B	2.10	2.80	H	0.40	0.60
C	1.20	1.60	J	0.08	0.20
D	0.89	1.40	K	0.6 REF.	
E	1.78	2.04	L	0.85	1.15
F	0.30	0.50			

CLASSIFICATION OF $h_{FE(2)}$

Product-Rank	M8050-L
Range	80-300



MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	40	V
Collector - Emitter Voltage	V_{CEO}	25	V
Emitter - Base Voltage	V_{EBO}	6	V
Collector Current - Continuous	I_C	0.8	A
Collector Power Dissipation	P_C	0.2	W
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Parameter	Test Conditions	Symbol	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	I_C =100μA, I_E =0	$V_{(BR)CBO}$	40	-	-	V
Collector-Emitter Breakdown Voltage[1]	I_C =1mA, I_B =0	$V_{(BR)CEO}$	25	-	-	V
Emitter-Base Breakdown Voltage	I_E =100μA, I_C =0	$V_{(BR)EBO}$	6	-	-	V
Collector Cut-Off Current	V_{CB}=35V, I_E=0	I_{CBO}	-	-	0.1	μA
Emitter Cut-Off Current	V_{CE}=20V, I_B=0	I_{CEO}	-	-	0.1	μA
DC Current Gain	V_{CE}=1V, I_C=5mA	h_{FE1}	45	-	-	
	V_{CE}=1V, I_C=100mA	h_{FE2}	80	-	300	
	V_{CE}=1V, I_C=800mA	h_{FE3}	40	-	-	
Collector-Emitter Saturation Voltage	I_C=800mA, I_B=80mA	$V_{CE(sat)}$	-	-	0.5	V
Base-Emitter Saturation Voltage	I_C=800mA, I_B=80mA	$V_{BE(sat)}$	-	-	1.2	V
Transition frequency	V_{CE}=6V, I_C=20mA, f=30MHz	f_T	150	-	-	MHz

Note:
1. Pulse test：pulse width ≦ 300 S, duty cycle ≦ 2%.

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CHARACTERISTIC CURVES