Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

MMSS8050W-L
MMSS8050W-H
MMSS8050W-J

NPN Silicon Plastic-Encapsulate Transistor

Features

- SOT-323 Plastic-Encapsulate Transistors
- Capable of 0.2 Watts(Tamb=25^{O}C) of Power Dissipation.
- Collector-current 1.5A
- Collector-base Voltage 40V
- Operating and storage junction temperature range: -55^{O}C to +150^{O}C
- Marking : Y1
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Halogen free available upon request by adding suffix "-HF"

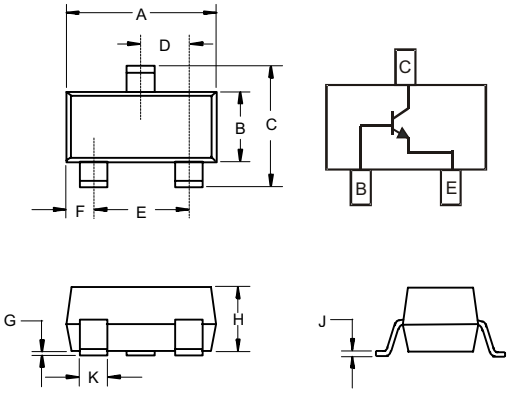
Electrical Characteristics @ 25ºC Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
OFF CHARACTERISTICS				
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage (I_C=100uAdc, I_E=0)	40	---	Vdc
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage (I_C=0.1mAdc, I_B=0)	25	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage (I_E=100uAdc, I_C=0)	5.0	---	Vdc
I_{CBO}	Collector Cutoff Current (V_{CB}=40Vdc, I_E=0)	---	0.1	uAdc
I_{CEO}	Collector Cutoff Current (V_{CE}=20Vdc, I_B=0)	---	0.1	uAdc
I_{EBO}	Emitter Cutoff Current (V_{EB}=5.0Vdc, I_C=0)	---	0.1	uAdc
ON CHARACTERISTICS				
$h_{FE(1)}$	DC Current Gain (I_C=100mAdc, V_{CE}=1.0Vdc)	120	400	---
$h_{FE(2)}$	DC Current Gain (I_C=800mAdc, V_{CE}=1.0Vdc)	40	---	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage (I_C=800mAdc, I_B=80mAdc)	---	0.5	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage (I_C=800mAdc, I_B=80mAdc)	---	1.2	Vdc
C_{ob}	Collector output capacitance	---	15	pF
SMALL-SIGNAL CHARACTERISTICS				
f_T	Transistor Frequency (I_C=50mAdc, V_{CE}=10Vdc, f=30MHz)	100	---	MHz

CLASSIFICATION OF $H_{FE(1)}$

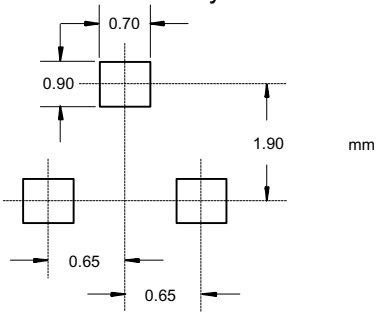
Rank	L	H	J
Range	120-200	200-350	300-400

SOT-323



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.083	.096	2.10	2.45	
D	.026 Nominal		0.65Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.006	.016	.15	.40	

Suggested Solder Pad Layout



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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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