



MMSS8050W-L
MMSS8050W-H
MMSS8050W-J

NPN Silicon
Plastic-Encapsulate
Transistor

Features

- SOT-323 Plastic-Encapsulate Transistors
- Capable of 0.2 Watts($T_{amb}=25^{\circ}C$) of Power Dissipation.
- Collector-current 1.5A
- Collector-base Voltage 40V
- Operating and storage junction temperature range: $-55^{\circ}C$ to $+150^{\circ}C$
- 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 @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
OFF CHARACTERISTICS				
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=100\mu A$, $I_E=0$)	40	---	Vdc
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=0.1mA$, $I_B=0$)	25	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=100\mu A$, $I_C=0$)	5.0	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=40Vdc$, $I_E=0$)	---	0.1	μA
I_{CEO}	Collector Cutoff Current ($V_{CE}=20Vdc$, $I_B=0$)	---	0.1	μA
I_{EBO}	Emitter Cutoff Current ($V_{EB}=5.0Vdc$, $I_C=0$)	---	0.1	μA

ON CHARACTERISTICS

$h_{FE(1)}$	DC Current Gain ($I_C=100mA$, $V_{CE}=1.0Vdc$)	120	400	---
$h_{FE(2)}$	DC Current Gain ($I_C=800mA$, $V_{CE}=1.0Vdc$)	40	---	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=800mA$, $I_B=80mA$)	---	0.5	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=800mA$, $I_B=80mA$)	---	1.2	Vdc
C_{ob}	Collector output capacitance	---	15	pF

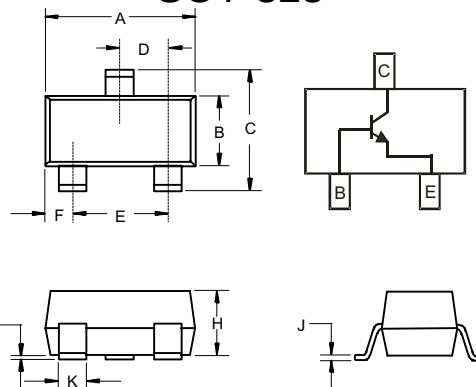
SMALL-SIGNAL CHARACTERISTICS

f_T	Transistor Frequency ($I_C=50mA$, $V_{CE}=10Vdc$, $f=30MHz$)	100	---	MHz
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CLASSIFICATION OF $h_{FE(1)}$

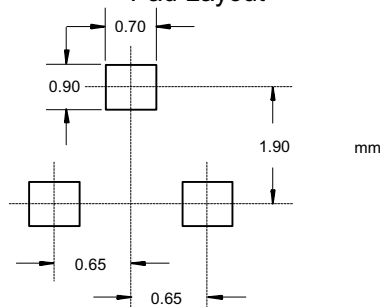
Rank	L	H	J
Range	120-200	200-350	300-400

SOT-323



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
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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