

MPSH81
PNP SILICON
RF TRANSISTOR



TO-92 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR MPSH81 is a PNP Silicon Transistor designed for general purpose RF amplifier applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$)

Collector-Base Voltage
Collector-Emitter Voltage
Emitter-Base Voltage
Continuous Collector Current
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V_{CBO}	20
V_{CEO}	20
V_{EBO}	3.0
I_C	50
P_D	350
T_J, T_{stg}	-65 to +150
Θ_{JC}	357

UNITS

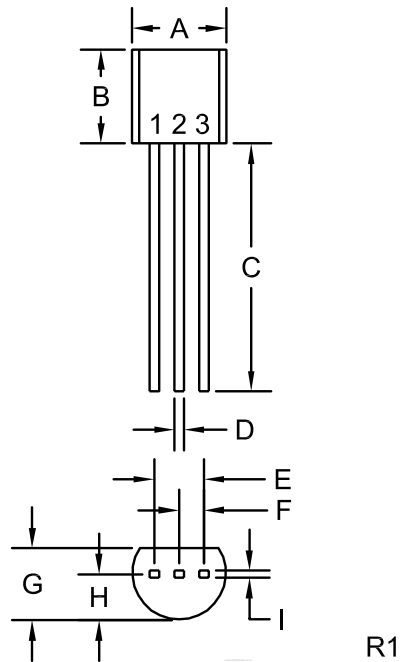
V
V
V
mA
mW
$^{\circ}\text{C}$
$^{\circ}\text{C/W}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	$V_{CB}=10\text{V}$		100	nA
I_{EBO}	$V_{EB}=2.0\text{V}$		100	nA
BV_{CBO}	$I_C=10\mu\text{A}$	— 20		V
BV_{CEO}	$I_C=1.0\text{mA}$	20		V
BV_{EBO}	$I_E=10\mu\text{A}$	3.0		V
$V_{CE(SAT)}$	$I_C=5.0\text{mA}, I_B=0.5\text{mA}$		0.5	V
$V_{BE(ON)}$	$V_{CE}=10\text{V}, I_C=5.0\text{mA}$		0.9	V
h_{FE}	$V_{CE}=10\text{V}, I_C=5.0\text{mA}$	60		
f_T	$V_{CE}=10\text{V}, I_C=5.0\text{mA}, f=100\text{MHz}$	600		MHz
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$		0.85	pF
C_{ib}	$V_{CB}=10\text{V}, I_B=0, f=1.0\text{MHz}$		0.65	pF

R0 (25-April 2008)

TO-92 CASE - MECHANICAL OUTLINE



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A (DIA)	0.175	0.205	4.45	5.21
B	0.170	0.210	4.32	5.33
C	0.500	-	12.70	-
D	0.016	0.022	0.41	0.56
E	0.100		2.54	
F	0.050		1.27	
G	0.125	0.165	3.18	4.19
H	0.080	0.105	2.03	2.67
I	0.015		0.38	

LEAD CODE:

- 1) BASE
- 2) EMITTER
- 3) COLLECTOR

MARKING: FULL PART NUMBER

TO-92 (REV: R1)

R0 (25-April 2008)