MPSH10 MPSH11

SILICON NPN RF TRANSISTORS



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR MPSH10 and MPSH11 are silicon NPN RF transistors manufactured by the epitaxial planar process and designed for low noise UHF/VHF amplifier and high output oscillator applications.

MARKING: FULL PART NUMBER



MAXIMUM RATINGS: (T _A =25°C)	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	3.0	V
Power Dissipation	P_{D}	350	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	$\Theta_{\sf JA}$	357	°C/W
ELECTRICAL CHARACTERISTICS: /T -05%	unlana athamuian na	stad\	

ELECTRICAL CHARACTERISTICS: (T _A =25°C unless otherwise noted)				
SYMBOL I _{CBO}	TEST CONDITIONS V _{CB} =25V	MIN	MAX 100	UNITS nA
I _{EBO}	V _{EB} =2.0V		100	nA
BV CBO	I _C =100μA	30		V
BV CEO	I _C =1.0mA	25		V
BV _{EBO}	I _E =10μA	3.0		V
V _{CE} (SAT)	I _C =4.0mA, I _B =0.4mA		0.50	V
V _{BE(ON)}	V _{CE} =10V, I _B =4.0mA		0.95	V
hFE	V _{CE} =10V, I _C =4.0mA	60		
f _T	V _{CE} =10V, I _C =4.0mA, f=100MHz	650		MHz
C_{cb}	V_{CB} =10V, I_E =0, f=1.0MHz		0.70	pF
C _{rb}	V_{CB} =10V, I_E =0, f=1.0MHz (MPSH10)	0.35	0.65	pF
C _{rb}	V _{CB} =10V, I _E =0, f=1.0MHz (MPSH11)	0.60	0.90	pF
rb'C _C	V_{CB} =10V, I_{C} =4.0mA, f=31.8MHz		9.0	ps

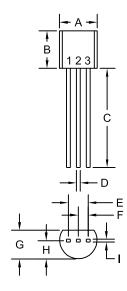
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TO-92 CASE - MECHANICAL OUTLINE

R1



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

TO-92 (REV: R1)

LEAD CODE:

- 1) Base
- 2) Emitter 3) Collector

MARKING:

FULL PART NUMBER