MPS6520 MPS6521

SILICON NPN TRANSISTORS

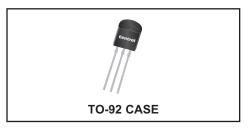


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DESCRIPTION:

The CENTRAL SEMICONDUCTOR MPS6520 and MPS6521 are silicon NPN epitaxial transistors designed for complementary amplifier applications requiring low noise and high DC current gains. The PNP complementary devices are MPS6522 and MPS6523 respectively.

MARKING: FULL PART NUMBER



MAXIMUM RATINGS: (T _A =25°C)	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	4.0	V
Continuous Collector Current	$I_{\mathbb{C}}$	100	mA
Power Dissipation	P_{D}	625	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C

ELECTRICA	L CHARACTERISTICS: (TA=25°C unle	ess otherwise	e noted)		
SYMBOL	TEST CONDITIONS	MIN	ΤΫ́Ρ	MAX	UNITS
ICBO	V _{CB} =30V			50	nA
ICBO	V _{CB} =30V, T _A =60°C			1.0	μΑ
BV CEO	I _C =500μA	25			V
BVEBO	I _E =10μA	4.0			V
V _{CE(SAT)}	I _C =50mA, I _B =5.0mA			0.5	V
f _T	V _{CE} =10V, I _C =2.0mA		300		MHz
f _T	V _{CE} =10V, I _C =10mA		400		MHz
C_{ob}	V_{CB} =10V, I_{E} =0, f=100kHz			3.5	pF
NF	V_{CE} =5.0V, I_{C} =10 μ A,				
	$R_S=10K\Omega$, BW=15.7kHz,				
	3.0dB points @ 10Hz and 10kHz			3.0	dB

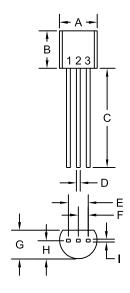
		MPS6520		MPS6521	
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX
h _{FE}	V_{CE} =10V, I_{C} =100 μ A	100	-	150	-
hFE	V_{CE} =10V, I_{C} =2.0mA	200	400	300	600

MPS6520 MPS6521

SILICON **NPN TRANSISTORS**



TO-92 CASE - MECHANICAL OUTLINE



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	
E	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) Emitter

R1

2) Base 3) Collector

MARKING:

FULL PART NUMBER

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- · Inventory bonding
- · Consolidated shipping options

- · Custom bar coding for shipments
- · Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- · Custom electrical curves
- Environmental regulation compliance
- · Customer specific screening
- · Up-screening capabilities

- · Special wafer diffusions
- · PbSn plating options
- Package details
- · Application notes
- · Application and design sample kits
- · Custom product and package development

CONTACT US

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