

#### **PNP SILICON TRANSISTORS**



# Central Semiconductor Corp.

www.centralsemi.com

## DESCRIPTION:

The CENTRAL SEMICONDUCTOR MPS6533 series types are PNP silicon transistors designed for general purpose amplifier applications. The NPN complementary types are MPS6530, MPS6531, MPS6532 respectively.

#### MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T <sub>A</sub> =25°C) Collector-Base Voltage	SYMBOL V <sub>CBO</sub>	<u>MPS6533</u> 40	<u>MPS6534</u> 40	MPS6535 30	UNITS V
Collector-Emitter Voltage	VCEO	40	40	30	V
Emitter-Base Voltage	V <sub>EBO</sub>		4.0		V
Continuous Collector Current	ΙC		600		mA
Power Dissipation	PD		625		mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>sta</sub>		-65 to +150		°C

#### ELECTRICAL CHARACTERISTICS: (T<sub>A</sub>=25°C unless otherwise noted)

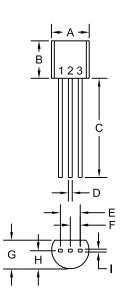
			MPS6533		MPS6534		MPS6535	
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	MIN	MAX	UNITS
I <sub>CBO</sub>	V <sub>CB</sub> =30V	-	50	-	50	-	-	nA
ICBO	V <sub>CB</sub> =30V, T <sub>A</sub> =60°C	-	2.0	-	2.0	-	-	μA
ICBO	V <sub>CB</sub> =20V	-	-	-	-	-	100	nA
ICBO	V <sub>CB</sub> =20V, T <sub>A</sub> =60°C	-	-	-	-	-	5.0	μA
BVCBO	Ι <sub>C</sub> =10μΑ	40	-	40	-	30	-	V
BVCEO	I <sub>C</sub> =10mA	40	-	40	-	30	-	V
BVEBO	I <sub>E</sub> =10μA	4.0	-	4.0	-	4.0	-	V
V <sub>CE</sub> (SAT)	I <sub>C</sub> =100mA, I <sub>B</sub> =10mA	-	0.5	-	0.3	-	0.5	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =100mA, I <sub>B</sub> =10mA	-	1.0	-	1.0	-	1.2	V
h <sub>FE</sub>	V <sub>CE</sub> =1.0V, I <sub>C</sub> =10mA	30	-	60	-	-	-	
h <sub>FE</sub>	V <sub>CE</sub> =1.0V, I <sub>C</sub> =100mA	40	120	90	270	30	-	
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =500mA	25	-	50	-	-	-	
C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=100kHz	-	6.0	-	6.0	-	6.0	pF
f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =50mA	250(TYF	<sup>&gt;</sup> )	250(TYF	<b>)</b>	250(TYF	<sup>&gt;</sup> )	MHz

R1 (29-November 2012)





PNP SILICON TRANSISTORS



#### TO-92 CASE - MECHANICAL OUTLINE

DIMENSIONS						
	INCHES		MILLIMETER			
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

2) Base

3) Collector

R1

MARKING: FULL PART NUMBER

R1 (29-November 2012)

www.centralsemi.com

### 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

#### DESIGNER SUPPORT/SERVICES

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

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

· Custom product packing

Custom bar coding for shipments

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

#### REQUESTING PRODUCT PLATING

- If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when 1. ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

#### CONTACT US

#### **Corporate Headquarters & Customer Support Team**

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA Main Tel: (631) 435-1110 Main Fax: (631) 435-1824 Support Team Fax: (631) 435-3388 www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

Worldwide Distributors: www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's LIMITATIONS AND DAMAGES DISCLAIMER. which is part of Central's Standard Terms and Conditions of sale, visit: www.centralsemi.com/terms



# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Central Semiconductor: MPS6535 MPS6534