

CentralTM Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824

Manufacturers of World Class Discrete Semiconductors

MPS6522
MPS6523

PNP SILICON TRANSISTOR

JEDEC TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR MPS6522, MPS6523 types are PNP Silicon Epitaxial Transistors designed for complementary amplifier applications requiring low noise and high DC Current gain. The NPN complementary types are MPS6520, MPS6521 respectively.

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

	SYMBOL		UNIT
Collector-Base Voltage	V _{CB0}	25	V
Collector-Emitter Voltage	V _{CE0}	25	V
Emitter-Base Voltage	V _{EB0}	4.0	V
Collector Current	I _C	100	mA
Power Dissipation	P _D	625	mW
Operating and Storage Temperature	T _J , T _{stg}	-65 TO +150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MPS6522		MPS6523		UNIT
		MIN	MAX	MIN	MAX	
I _{CB0}	V _{CB} =20V		0.05		0.05	μA
I _{CB0}	V _{CB} =20V, T _A =60°C		1.0		1.0	μA
BV _{CE0}	I _C =500μA	25		25		V
BV _{EB0}	I _E =10μA	4.0		4.0		V
V _{CE} (SAT)	I _C =50mA, I _B =5.0mA		0.5		0.5	V
h _{FE}	V _{CE} =10V, I _C =100μA	100	150			
h _{FE}	V _{CE} =10V, I _C =2.0mA	200	400	300	600	
f _T	V _{CE} =10V, I _C =2.0mA	250TYP		250TYP		MHz
f _T	V _{CE} =10V, I _C =10mA	350TYP		350TYP		MHz
C _{ob}	V _{CB} =10V, I _E =0, f=100kHz		3.5		3.5	pF
NF	V _{CE} =5.0V, I _C =10μA, R _s =10kΩ, BW=15.7 kHz, 3.0dB points @ 10Hz and 10kHz		3.0		3.0	dB

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

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when 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.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.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.centrasemi.com/terms