

# Small Signal Transistors

## TO-92 Case (Continued)



TYPE NO.	DESCRIPTION	LEAD CODE	V <sub>CBO</sub> (V)	V <sub>CEO</sub> (V)	V <sub>EBO</sub> (V)	I <sub>CBO</sub> @ V <sub>CB</sub>		h <sub>FE</sub>		@ V <sub>CE</sub> @ I <sub>c</sub>		V <sub>CE</sub> (SAT) @ I <sub>c</sub>		C <sub>ob</sub> (pF)	f <sub>T</sub> (MHz)	NF (dB)	t <sub>off</sub>		
						I <sub>CES</sub> (nA)	I <sub>CEV</sub> (V)	MIN	MAX	MIN	MAX	MIN	MAX					MIN	MAX
MPS3710	NPN LOW NOISE	EBC	30	30	6.0	100	20	90	330	5.0	1.0	1.0	10	--	--	--	--		
MPS3711	NPN LOW NOISE	EBC	30	30	6.0	100	20	180	660	1.0	1.0	1.0	10	--	--	--	--		
MPS3721	NPN LOW NOISE	EBC	18	18	5.0	500	18	60	660	10	2.0	--	--	3.5	--	--	--		
MPS3826	NPN AMPL/SWITCH	EBC	60	45	4.0	100	30	40	160	10	10	--	--	3.5	200	--	--		
MPS3827	NPN AMPL/SWITCH	EBC	60	45	4.0	100	30	100	400	10	10	--	--	3.5	200	--	--		
MPS5172	NPN LOW NOISE	EBC	25	25	5.0	100	25	100	500	10	10	0.25	10	10	120*	--	--		
MPS5306	NPN DARLINGTON	EBC	25	25	12	100	25	7,000	70,000	5.0	2.0	1.40	200	10	60	--	--		
MPS5308	NPN DARLINGTON	EBC	40	40	12	100	40	7,000	70,000	5.0	2.0	1.40	200	10	60	--	--		
MPS6507	NPN RF OSC	EBC	30	20	3.0	50	15	25	--	10	2.0	--	--	2.5	700	--	--		
MPS6511	NPN RF OSC	EBC	30	20	3.0	50	15	25	--	10	10	--	--	2.5	--	--	--		
MPS6512	NPN AMPL/SWITCH	EBC	40	30	4.0	50	30	50	100	10	2.0	0.50	50	3.5	--	--	--		
MPS6513	NPN AMPL/SWITCH	EBC	40	30	4.0	50	30	90	180	10	2.0	0.50	50	3.5	--	--	--		
MPS6514	NPN AMPL/SWITCH	EBC	40	25	4.0	50	30	150	300	10	2.0	0.50	50	3.5	--	--	--		
MPS6515	NPN AMPL/SWITCH	EBC	40	25	4.0	50	30	250	500	10	2.0	0.50	50	3.5	--	--	--		
MPS6516	PNP AMPL/SWITCH	EBC	40	40	4.0	50	30	50	100	10	2.0	0.50	50	4.0	--	--	--		
MPS6517	PNP AMPL/SWITCH	EBC	40	40	4.0	50	30	90	180	10	2.0	0.50	50	4.0	--	--	--		
MPS6518	PNP AMPL/SWITCH	EBC	40	40	4.0	50	30	150	300	10	2.0	0.50	50	4.0	--	--	--		
MPS6519	PNP AMPL/SWITCH	EBC	25	25	4.0	50	20	250	500	10	2.0	0.50	50	4.0	--	--	--		
MPS6520	NPN LOW NOISE	EBC	40	25	4.0	50	30	200	400	10	2.0	0.50	50	3.5	--	3.0	--		
MPS6521	NPN LOW NOISE	EBC	40	25	4.0	50	30	300	600	10	2.0	0.50	50	3.5	--	3.0	--		
MPS6522	PNP LOW NOISE	EBC	25	25	4.0	50	20	200	400	10	2.0	0.50	50	3.5	--	3.0	--		
MPS6523	PNP LOW NOISE	EBC	25	25	4.0	50	20	300	600	10	2.0	0.50	50	3.5	--	3.0	--		
MPS6531	NPN AMPL/SWITCH	EBC	60	40	5.0	50	40	90	270	1.0	100	0.30	100	5.0	--	--	--		
MPS6532	NPN AMPL/SWITCH	EBC	50	30	5.0	100	30	30	--	1.0	100	0.50	100	5.0	--	--	--		
MPS6534	PNP AMPL/SWITCH	EBC	40	40	4.0	50	30	90	270	1.0	100	0.30	100	7.0	--	--	--		
MPS6535	PNP AMPL/SWITCH	EBC	30	30	4.0	50	30	30	--	1.0	100	0.50	100	7.0	--	--	--		
MPS6560	NPN AMPL/SWITCH	EBC	25	25	5.0	100	20	50	200	1.0	500	0.50	500	30	60	--	--		
MPS6561	NPN AMPL/SWITCH	EBC	20	20	4.0	100	20	50	200	1.0	350	0.50	350	30	60	--	--		
MPS6562	PNP AMPL/SWITCH	EBC	25	25	5.0	100	20	50	200	1.0	500	0.50	500	30	60	--	--		
MPS6563	PNP AMPL/SWITCH	EBC	20	20	4.0	100	20	50	200	1.0	350	0.50	350	30	60	--	--		
MPS6564	NPN AMPL/SWITCH	EBC	--	45	5.0	500	40	25	--	5.0	40	0.50	10	4.0	--	--	--		
MPS6566	NPN AMPL/SWITCH	EBC	60	45	4.0	100	30	100	400	10	10	0.40	10	3.5	--	--	--		
MPS6601	NPN AMPL/SWITCH	EBC	25	25	4.0	100	25	50	--	1.0	500	0.60	1000	50	100	--	--		
MPS6602	NPN AMPL/SWITCH	EBC	40	40	4.0	100	30	50	--	1.0	500	0.60	1000	50	100	--	--		
MPS6651	PNP AMPL/SWITCH	EBC	25	25	4.0	100	25	50	--	1.0	500	0.60	1000	50	100	--	--		
MPS6652	PNP AMPL/SWITCH	EBC	40	40	4.0	100	30	50	--	1.0	500	0.60	1000	50	100	--	--		
MPS8097	NPN LOW NOISE	EBC	60	40	6.0	30	40	250	5.0	0.10	--	--	--	4.0	--	2.0	--		
MPS8098	NPN AMPL/SWITCH	EBC	60	60	6.0	100	60	100	300	5.0	1.0	0.30	100	6.0	150	--	--		
MPS8099	NPN AMPL/SWITCH	EBC	80	80	6.0	100	80	100	300	5.0	1.0	0.30	100	6.0	150	--	--		
MPS8598	PNP AMPL/SWITCH	EBC	60	60	5.0	100	60	100	300	5.0	1.0	0.30	100	8.0	150	--	--		
MPS8599	PNP AMPL/SWITCH	EBC	80	80	5.0	100	80	100	300	5.0	1.0	0.30	100	8.0	150	--	--		
MPSA05	NPN AMPL/SWITCH	EBC	60	60	4.0	100	60	50	--	1.0	100	0.25	100	--	100	--	--		
MPSA06	NPN AMPL/SWITCH	EBC	80	80	4.0	100	80	50	--	1.0	100	0.25	100	--	100	--	--		
MPSA13	NPN DARLINGTON	EBC	30	30*	10	100	30	10,000	--	5.0	100	1.50	100	--	125	--	--		
MPSA14	NPN DARLINGTON	EBC	30	30*	10	100	30	20,000	--	5.0	100	1.50	100	--	125	--	--		
MPSA18	NPN LOW NOISE	EBC	45	45	6.5	50	30	500	1,500	5.0	10	--	--	3.0	100	1.5	--		
MPSA20	NPN AMPL/SWITCH	EBC	--	40	4.0	100	30	40	400	10	5.0	0.25	10	4.0	125	--	--		

Devices are available lead formed.  
See pages 216 thru 219 for details.  
Also available in Ammopack or Tape & Reel.  
See pages 230 thru 235 for details.

**Central**  
Semiconductor Corp.  
www.centalsemi.com

(6-December 2004)

## 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 (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
- 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](http://www.centrasemi.com)

**Worldwide Field Representatives:**  
[www.centrasemi.com/wwreps](http://www.centrasemi.com/wwreps)

**Worldwide Distributors:**  
[www.centrasemi.com/wwdistributors](http://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](http://www.centrasemi.com/terms)