

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

MPS-A92 MPS-A93 PNP

SILICON HIGH VOLTAGE TRANSISTORS

JEDEC TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR MPS-A92 Series types are PNP Molded Epoxy Small Signal Silicon Transistors designed for high voltage applications.

MAXIMUM RATINGS (T_A=25°C)

| SYMBOL | MPS-A92 | MPS-A93 | UNIT | |
|---|-----------------------------------|-------------|------|-------|
| Collector-Base Voltage | V _{CB0} | 300 | 200 | V |
| Collector-Emitter Voltage | V _{CEO} | 300 | 200 | V |
| Emitter-Base Voltage | V _{EBO} | 5.0 | 5.0 | V |
| Collector Current | I _C | 500 | 500 | mA |
| Power Dissipation | P _D | 625 | 625 | mW |
| Operating and Storage Junction Temperature | T _J , T _{stg} | -65 TO +150 | | °C |
| Thermal Resistance | θ _{JA} | .200 | | °C/mW |

ELECTRICAL CHARACTERISTICS (T_A=25°C)

| SYMBOL | TEST CONDITIONS | MPS-A92 | | MPS-A93 | | UNIT |
|----------------------|--|---------|------|---------|------|------|
| | | MIN | MAX | MIN | MAX | |
| I _{CB0} | V _{CB} =200V | | 0.25 | | - | μA |
| I _{CB0} | V _{CB} =160V | | - | | 0.25 | μA |
| I _{EBO} | V _{BE} =3.0V | | 0.1 | | 0.1 | μA |
| BV _{CB0} | I _C =100μA | 300 | | 200 | | V |
| BV _{CEO} | I _C =1.0mA | 300 | | 200 | | V |
| BV _{EBO} | I _E =10μA | 5.0 | | 5.0 | | V |
| V _{CE(SAT)} | I _C =20mA, I _B =2.0mA | | 0.8 | | 0.4 | V |
| V _{BE(SAT)} | I _C =20mA, I _B =2.0mA | | 0.9 | | 0.9 | V |
| h _{FE} | V _{CE} =10V, I _C =1.0mA | 25 | | 25 | | |
| h _{FE} | V _{CE} =10V, I _C =10mA | 40 | | 40 | | |
| h _{FE} | V _{CE} =10V, I _C =30mA | 25 | - | 30 | 150 | |
| f _T | V _{CE} =20V, I _C =10mA, f=100MHz | 50 | | 50 | | MHz |
| C _{ob} | V _{CB} =20V, I _E =0, f=1.0MHz | | 6.0 | | 8.0 | pF |