

# Central<sup>TM</sup> 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<sub>A</sub>=25°C)

SYMBOL	MPS-A92	MPS-A93	UNIT	
Collector-Base Voltage	V <sub>CB0</sub>	300	200	V
Collector-Emitter Voltage	V <sub>CEO</sub>	300	200	V
Emitter-Base Voltage	V <sub>EBO</sub>	5.0	5.0	V
Collector Current	I <sub>C</sub>	500	500	mA
Power Dissipation	P <sub>D</sub>	625	625	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 TO +150		°C
Thermal Resistance	θ <sub>JA</sub>	.200		°C/mW

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C)

SYMBOL	TEST CONDITIONS	MPS-A92		MPS-A93		UNIT
		MIN	MAX	MIN	MAX	
I <sub>CB0</sub>	V <sub>CB</sub> =200V		0.25		-	μA
I <sub>CB0</sub>	V <sub>CB</sub> =160V		-		0.25	μA
I <sub>EBO</sub>	V <sub>BE</sub> =3.0V		0.1		0.1	μA
BV <sub>CB0</sub>	I <sub>C</sub> =100μA	300		200		V
BV <sub>CEO</sub>	I <sub>C</sub> =1.0mA	300		200		V
BV <sub>EBO</sub>	I <sub>E</sub> =10μA	5.0		5.0		V
V <sub>CE</sub> (SAT)	I <sub>C</sub> =20mA, I <sub>B</sub> =2.0mA		0.8		0.4	V
V <sub>BE</sub> (SAT)	I <sub>C</sub> =20mA, I <sub>B</sub> =2.0mA		0.9		0.9	V
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =1.0mA	25		25		
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =10mA	40		40		
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =30mA	25	-	30	150	
f <sub>T</sub>	V <sub>CE</sub> =20V, I <sub>C</sub> =10mA, f=100MHz	50		50		MHz
C <sub>ob</sub>	V <sub>CB</sub> =20V, I <sub>E</sub> =0, f=1.0MHz		6.0		8.0	pF