

# Central<sup>TM</sup> Semiconductor Corp.

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

MPSA05 MPSA06 NPN  
MPSA55 MPSA56 PNP

COMPLEMENTARY SILICON TRANSISTOR

JEDEC TO-92 CASE (EBC)

## DESCRIPTION

The CENTRAL SEMICONDUCTOR MPSA05, MPSA55 series types are Complementary Epoxy Molded Silicon Transistors designed for low-power output and medium power driver applications.

## MAXIMUM RATINGS (T<sub>A</sub>=25°C)

	SYMBOL	MPSA05 MPSA55	MPSA06 MPSA56	UNITS
Collector-Base Voltage	V <sub>CBO</sub>	60	80	V
Collector-Emitter Voltage	V <sub>CEO</sub>	60	80	V
Emitter-Base Voltage	V <sub>EBO</sub>	4.0	4.0	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/W

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

SYMBOL	TEST CONDITIONS	MPSA05 MPSA55		MPSA06 MPSA56		UNITS
		MIN	MAX	MIN	MAX	
I <sub>CBO</sub>	V <sub>CB</sub> =Rated V <sub>CBO</sub>		100		100	nA
I <sub>CES</sub>	V <sub>CE</sub> =60V		100		100	nA
BV <sub>CEO</sub>	I <sub>C</sub> =1.0mA	60		80		V
BV <sub>EBO</sub>	I <sub>C</sub> =100μA	4.0		4.0		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =100mA, I <sub>B</sub> =10mA		0.25		0.25	V
V <sub>BE(ON)</sub>	V <sub>CE</sub> =1.0V, I <sub>C</sub> =100mA		1.20		1.20	V
h <sub>FE</sub>	V <sub>CE</sub> =1.0V, I <sub>C</sub> =10mA	100		100		
h <sub>FE</sub>	V <sub>CE</sub> =1.0V, I <sub>C</sub> =100mA	100		100		
f <sub>T</sub>	V <sub>CE</sub> =2.0V, I <sub>C</sub> =10mA, f=100MHz (NPN types)	100		100		MHz
f <sub>T</sub>	V <sub>CE</sub> =1.0V, I <sub>C</sub> =100mA, f=100MHz (PNP types)	50		50		MHz