

CentralTM Semiconductor Corp.

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

Manufacturers of World Class Discrete Semiconductors

MPS8098
MPS8099

NPN SILICON TRANSISTOR

JEDEC TO-92 CASE (EBC)

DESCRIPTION

The CENTRAL SEMICONDUCTOR MPS8098, MPS8099 types are Epoxy Molded Silicon NPN Transistors designed for general purpose audio amplifier applications and complementary circuits. The PNP complementary types are MPS8598 and MPS8599.

MAXIMUM RATINGS (T_A = 25°C)

	SYMBOL	MPS8098	MPS8099	UNITS
Collector-Base Voltage	V _{CB0}	60	80	V
Collector-Emitter Voltage	V _{CEO}	60	80	V
Emitter-Base Voltage	V _{EBO}	6.0	6.0	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/W

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

SYMBOL	TEST CONDITIONS	MPS8098		MPS8099		UNITS
		MIN	MAX	MIN	MAX	
I _{CB0}	V _{CB} = Rated V _{CB0}		0.1		0.1	μA
I _{CEO}	V _{CE} = 60V		0.1		0.1	μA
I _{EBO}	V _{BE} = 6.0V		0.1		0.1	μA
BV _{CB0}	I _C = 100μA	60		80		V
BV _{CEO}	I _C = 10mA	60		80		V
BV _{EBO}	I _C = 10μA	6.0		6.0		V
V _{CE(SAT)}	I _C = 100mA, I _B = 5.0mA		0.4		0.4	V
V _{CE(SAT)}	I _C = 100mA, I _B = 10mA		0.3		0.3	V
V _{BE(ON)}	V _{CE} = 5.0V, I _C = 1.0mA	0.5	0.7	-	-	V
V _{BE(ON)}	V _{CE} = 5.0V, I _C = 10mA	-	-	0.6	0.8	V
h _{FE}	V _{CE} = 5.0V, I _C = 1.0mA	100	300	100	300	
h _{FE}	V _{CE} = 5.0V, I _C = 10mA	100		100		
h _{FE}	V _{CE} = 5.0V, I _C = 100mA	75		75		
f _T	V _{CE} = 5.0V, I _C = 10mA, f = 100MHz	150		150		MHz
C _{ob}	V _{CB} = 5.0V, I _E = 0, f = 1.0MHz		6.0		6.0	pF
C _{ib}	V _{CB} = 0.5V, I _C = 0, f = 1.0MHz		25		25	pF