

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

MPQ2369

NPN SILICON QUAD TRANSISTOR

JEDEC TO-116 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR MPQ2369 is comprised of four independent silicon transistors mounted in a 14 PIN DIP, designed for high speed saturated applications.

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

	SYMBOL		UNIT
Collector-Base Voltage	V _{CB0}	40	V
Collector-Emitter Voltage	V _{CE0}	15	V
Emitter-Base Voltage	V _{EB0}	4.5	V
Collector Current	I _C	500	mA
Power Dissipation	P _D (EACH TRANSISTOR)	500	mW
Power Dissipation	P _D (TOTAL PACKAGE)	1500	mW
Operating and Storage Junction Temperature	T _J , T _{STG}	-65 TO +150	°C

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
I _{CB0}	V _{CB} =20V			400	nA
I _{EB0}	V _{EB} =3.0V			500	nA
BV _{CB0}	I _C =10μA	40			V
BV _{CE0}	I _C =10mA	15			V
BV _{EB0}	I _E =10μA	4.5			V
V _{CE(SAT)}	I _C =10mA, I _B =1.0mA			0.25	V
V _{BE(SAT)}	I _C =10mA, I _B =1.0mA			0.9	V
h _{FE}	V _{CE} =1.0V, I _C =10mA	40			
h _{FE}	V _{CE} =2.0V, I _C =100mA	20			
f _T	V _{CE} =10V, I _C =10mA, f=100MHz	450			MHz
C _{ob}	V _{CB} =5.0V, I _E =0, f=140kHz			4.0	pF
C _{ib}	V _{BE} =0.5V, I _C =0, f=140kHz			5.0	pF
t _{on}	V _{CC} =3.0V, I _C =10mA, I _{B1} =3.0mA		9.0		ns
t _{off}	V _{CC} =3.0V, I _C =10mA, I _{B1} =3.0mA, I _{B2} =1.5mA		12		ns

CONNECTION DIAGRAM

