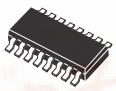
MMPQ6502

SURFACE MOUNT COMPLEMENTARY SILICON QUAD TRANSISTOR



SOIC-16 CASE

Central™ Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR MMPQ6502, consisting of two complementary pairs of transistors, available in the SOIC-16 surface mount package, is designed for general purpose amplifier and switching applications.

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Continuous Collector Current	I_C	1.0	A
Power Dissipation	P_D	1000	mW
Operating and Storage Junction Temperature	T_J,T_{stg}	-55 to +150	°C
Thermal Resistance (Total Package)	Θ_{JA}	125	°C/W
Thermal Resistance (Each Transistor)	Θ_{JA}	240	°C/W

ELECTRICAL CHARACTERISTICS: (T_C=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{CBO}	V_{CB}=50V			30	nA
I_{EBO}	V_{BE}=3.0V			30	nA
BV_{CBO}	I_C=10μA	60			V
BV_{CEO}	I_C=10mA	30			V
BV_{EBO}	I_E=10μA	5.0			V
$V_{CE(SAT)}$	I_C=150mA, I_B=15mA			0.4	V
$V_{CE(SAT)}$	I_C=300mA, I_B=30mA			1.4	V
$V_{BE(SAT)}$	I_C=150mA, I_B=15mA			1.3	V
$V_{BE(SAT)}$	I_C=300mA, I_B=30 mA			2.0	V
h_{FE}	V_{CE}=10V, I_C=1.0mA	50			
h_{FE}	V_{CE}=10V, I_C=10mA	75			
h_{FE}	V_{CE}=10V, I_C=150mA	100			
h_{FE}	V_{CE}=10V, I_C=300mA	30			
f_T	V_{CE}=20V, I_C=50mA, f=100MHz	200			MHz
C_{ib}	V_{BE}=2.0V, f=1.0MHz			30	pF
C_{ob}	V_{CB}=10V, f=1.0MHz			8.0	pF

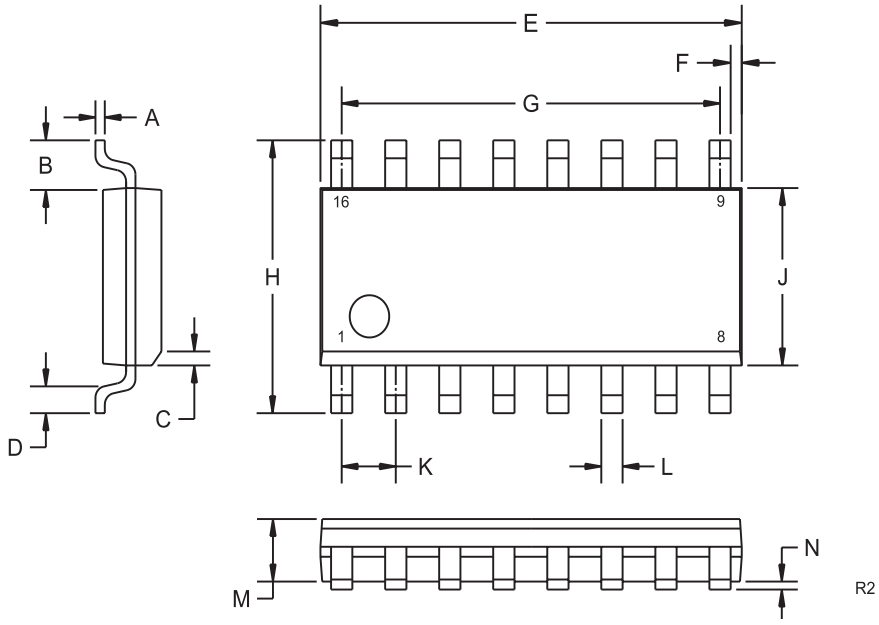
R0 (7-November 2001)

Central™
Semiconductor Corp.

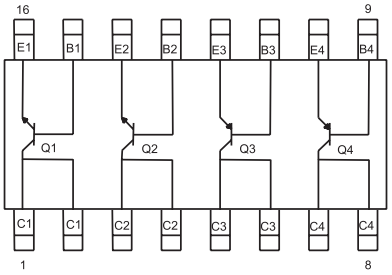
MMPQ6502

SMD COMPLEMENTARY
SILICON QUAD TRANSISTOR

SOIC-16 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.007	0.010	0.19	0.25
B	0.041		1.04	
C	0.010	0.020	0.25	0.50
D	0.020	0.035	0.50	0.90
E	0.386	0.394	9.80	10.00
F	0.010		0.25	
G	0.350		8.89	
H	0.228	0.244	5.80	6.20
J	0.150	0.157	3.80	4.00
K	0.050		1.27	
L	0.0138	0.0201	0.35	0.51
M	0.0531	0.0689	1.35	1.75
N	0.0039	0.0098	0.10	0.25

SOIC-16 (REV:R2)

R0 (7-November 2001)