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Manufacturers of World Class Discrete Semiconductors

MPQ2222
MPQ2222A

NPN SILICON QUAD TRANSISTOR

TO-116 CASE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR MPQ2222, MPQ2222A types are comprised of four independent Silicon NPN Transistors mounted in a 14 PIN DIP, designed for general purpose amplifier and switching applications.

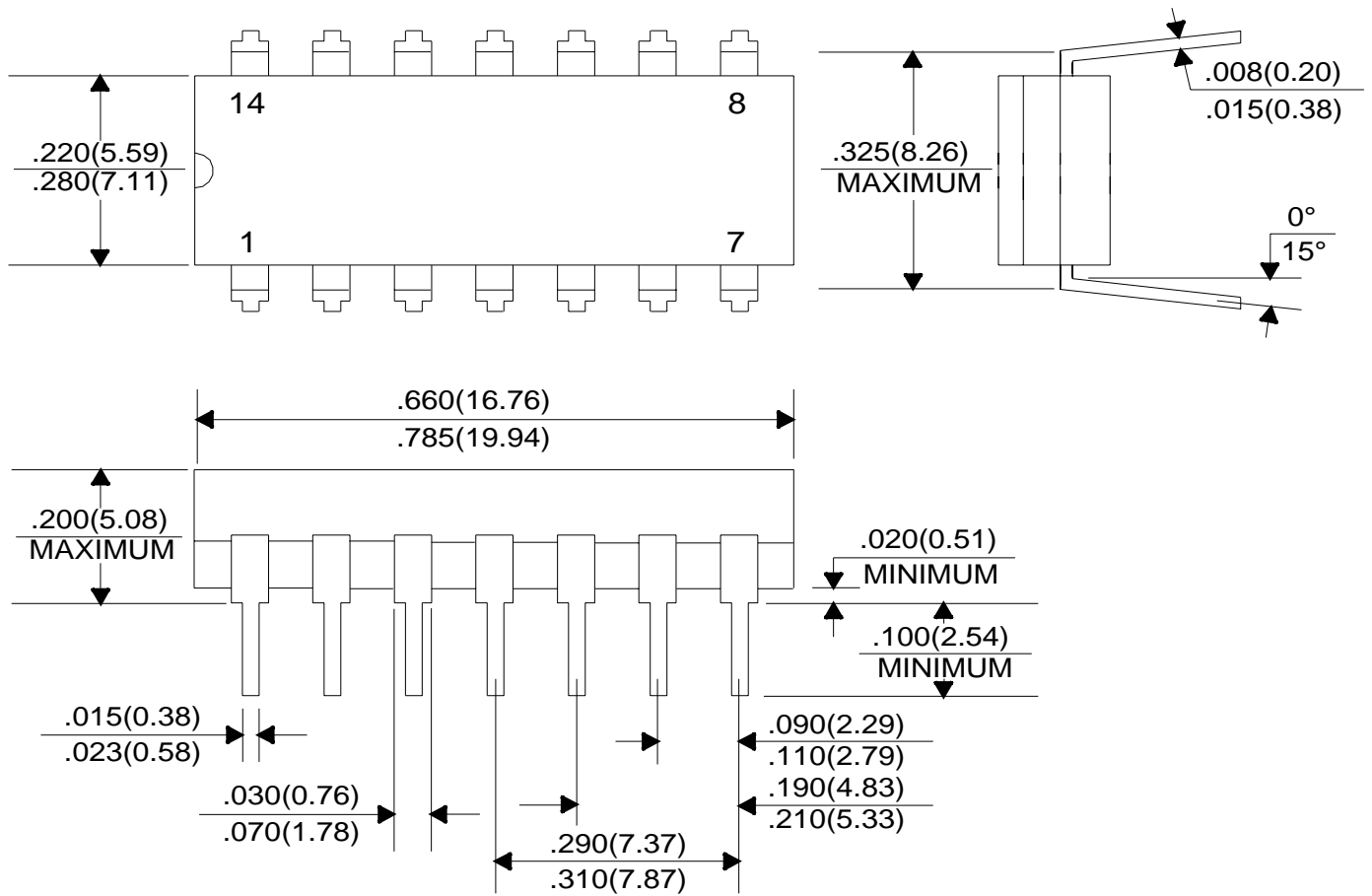
MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Collector-Base Voltage	V _{CBO}	60	V
Collector-Emitter Voltage	V _{CEO}	40	V
Emitter-Base Voltage	V _{EBO}	5.0	V
Collector Current	I _C	500	mA
Power Dissipation (Each Transistor)	P _D	650	mW
Power Dissipation (Total Package)	P _D	1.9	W
Operating and Storage			
Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance (Total Package)	θ _{JA}	66	°C/W

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

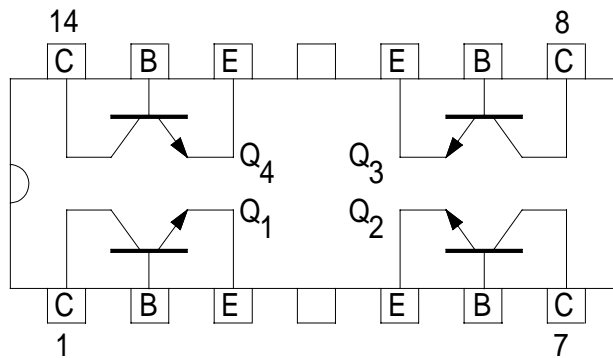
SYMBOL	TEST CONDITIONS	MPQ2222		MPQ2222A		UNITS
		MIN	MAX	MIN	MAX	
I _{CBO}	V _{CB} =50V		50			nA
I _{CBO}	V _{CB} =60V			10		nA
I _{EBO}	V _{EB} =3.0V		100	100		nA
BV _{CBO}	I _C =10μA	60		75		V
BV _{CEO}	I _C =10mA	40		40		V
BV _{EBO}	I _E =10μA	5.0		6.0		V
V _{CE(SAT)}	I _C =150mA, I _B =15mA		0.4		0.3	V
V _{CE(SAT)}	I _C =300mA, I _B =30mA		1.6			V
V _{CE(SAT)}	I _C =500mA, I _B =50mA				1.0	V
V _{BE(SAT)}	I _C =150mA, I _B =15mA		1.3	0.6	1.2	V
V _{BE(SAT)}	I _C =300mA, I _B =30mA		2.6			V
V _{BE(SAT)}	I _C =500mA, I _B =50mA				2.0	V
h _{FE}	V _{CE} =10V, I _C =100μA			35		
h _{FE}	V _{CE} =10V, I _C =1.0mA			50		
h _{FE}	V _{CE} =10V, I _C =10mA	75		75		
h _{FE}	V _{CE} =10V, I _C =150mA	100	300	100	300	
h _{FE}	V _{CE} =10V, I _C =300mA	30				
h _{FE}	V _{CE} =10V, I _C =500mA			40		
f _T	V _{CE} =20V, I _C =20mA, f=100MHz	200		200		MHz
C _{ob}	V _{CB} =10V, I _E =0, f=1.0MHz		8.0		8.0	pF
C _{ib}	V _{EB} =0.5V, I _C =0, f=1.0MHz		30		30	pF
t _r	V _{CC} =30V, V _{BE} =0.5, I _C =150mA, I _{B1} =15mA				35	ns
t _s	V _{CC} =30V, I _C =150mA, I _{B1} =I _{B2} =15mA				285	ns

TO-116 CASE - MECHANICAL OUTLINE



All Dimensions in Inches (mm).

PIN CONFIGURATION



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