

REV.	DESCRIPTION	APPROVED
1	V1.0	1997/05/06

DATA-SHEET

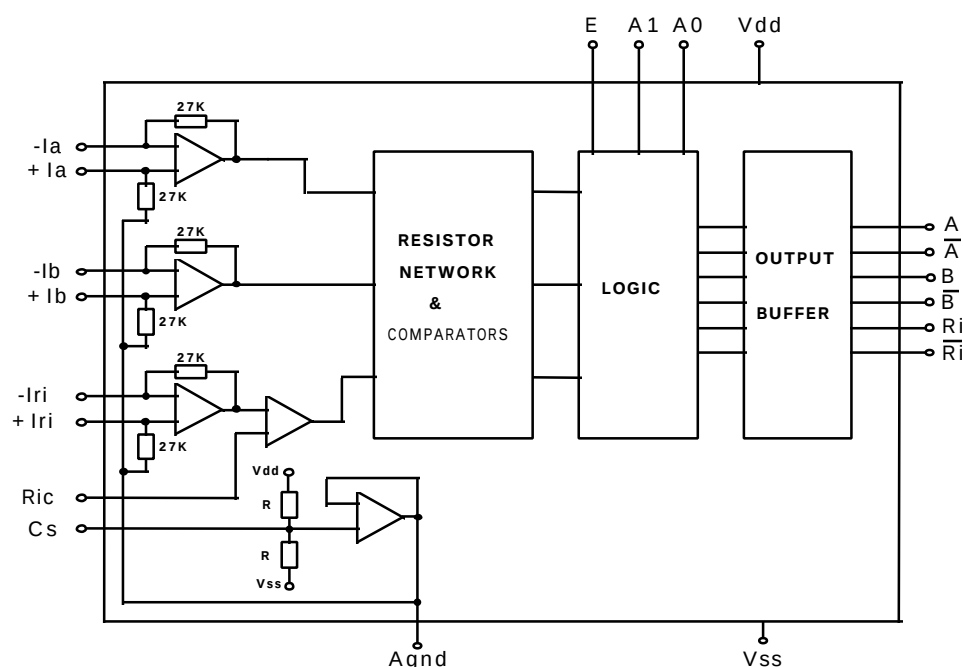
MIP40

Analog Interpolator

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1. FUNCTIONAL-BLOCK-DIAGRAM



Vdd - power supply (+)
Vss - power supply (-)
Agnd - analog ground
Cs - analog ground stabilisation input
-Ia, +Ia, -Ib, +Ib, -Iri, +Iri - signal inputs

Ric - reference level for reference impulse
A0, A1, E - logical inputs
A, Ainv, B, Binv, Ri, Riinv - digital differential outputs

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2. ELECTRICAL CHARACTERISTICS

2.1 Absolute maximum ratings

Parameter	Symbol	Min	Typ	Max	Unit
Supply voltage	VDD	-0,3		12	V
Power dissipation	PO			0.1	W
Operating temp.	TO	0		70	C
Storage temp.	Tstg	-55		150	C

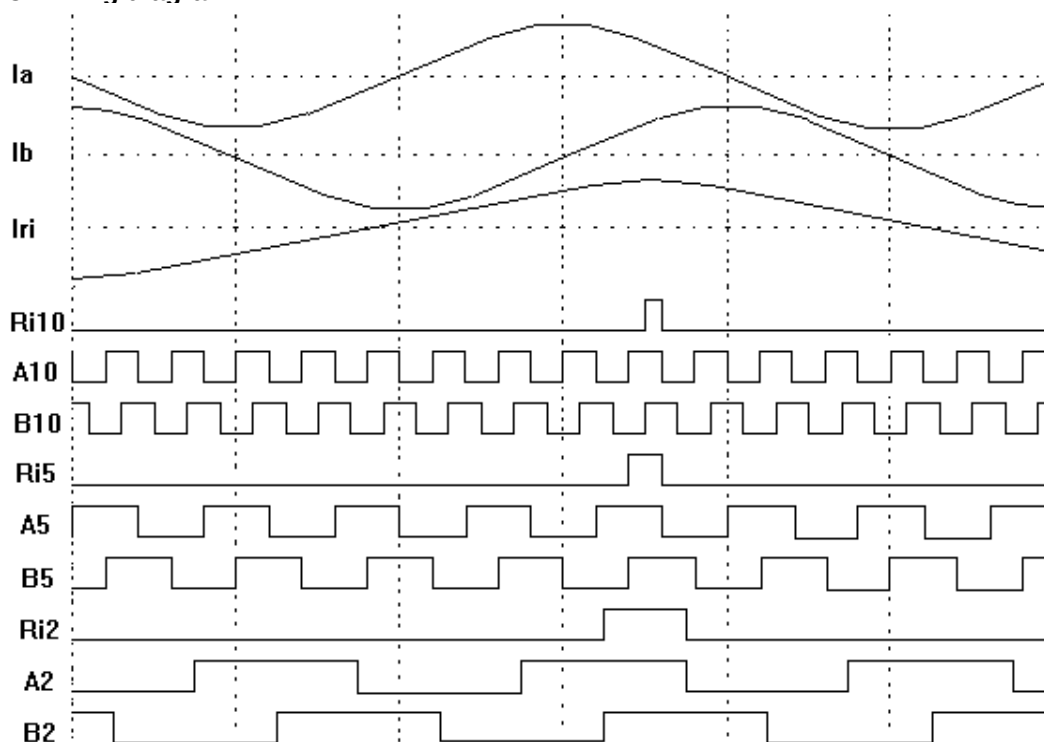
All voltages are referenced to Vss = 0V

2.2 Working conditions

Parameter	Symbol	Min	Typ	Max	Unit
Supply voltage	VDD	4	5	6	V
Supply current	I DD		4.5		mA
Input current	Ia, Ib	8	12		μA
Input current	Iri	2	7		μA
Input frequency	fIN			200	kHz
Output volt. level at VDD= 5V and I OUT = 10mA	VOH VOL		4.6 0.5		V V

All voltages are referenced to Vss = 0V

2.3 Timing diagram



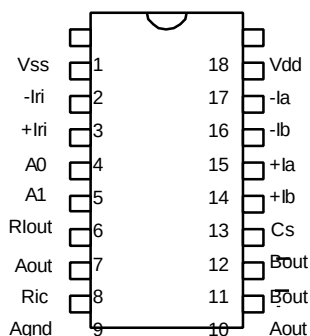
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2.4 Logical inputs truth table

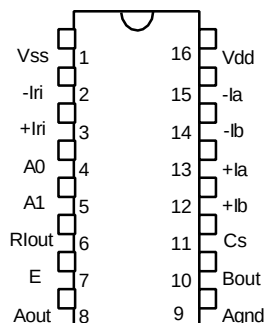
Interpolation factor	A0	A1
x1	0	0
x2	1	0
x 5 default settings	1	1
x10	0	1

Ri position	E
45 deg. el.	0
135 deg. el. default settings	1

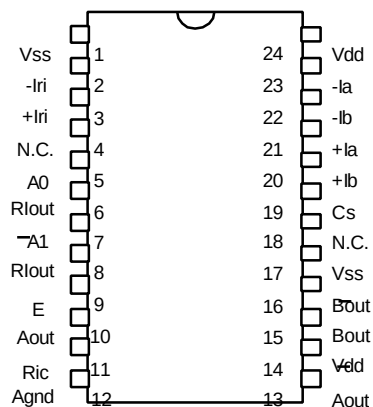
3. PACKAGE OPTIONS



MIP40N



MIP40DR



MIP40DE

4. ORDERING INFORMATION

Product -
Order code

Package

Temp, range - working

MIP40DR SOIC16W - plastic 16 pin SMD
MIP40DE SOIC24 - plastic 16 pin SMD
MIP40N CERDIP - ceramic 18 pin dual in line

from 0°C to 70°C
from 0°C to 70°C
from -25°C to 85°C

For more detailed information please contact:

MAZeT GmbH
Branch office Jena - Mr. Dr. Mahler
Göschwitzer Str. 32
D-07745 Jena/Germany
Phone: +49 3641 2809-0
Telefax: +49 3641 2809-12
EMAIL: sales@MAZeT.de
<http://www.MAZeT.de>

5. TYPICAL APPLICATION

