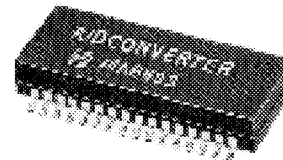
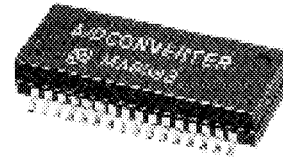


A/D, D/A Converter

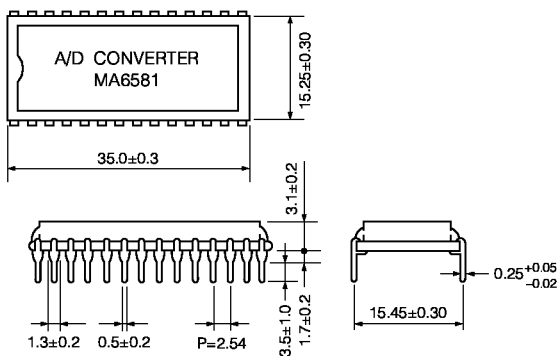
Intelligent A/D and D/A Converters which are assembled by Thin and Thick Film Hybrid IC's technologies. The high accuracy and high reliability equipment need the high accuracy digital to analog signal or analog to digital conversion.

■ Features

- Exclusively developed custom ICs and ROS (thin film resistors on silicon) chips are assembled
- High reliable ceramic packages and SMD types are available
- High speed conversion



■ Dimensions in mm (not to scale) DIL 28P Ceramic Package



★ Conversion Speed

	A / D Converter	D / A Converter
14 bit A / D Converter	16 μ s Typ.	350 ns (Current output)
16 bit A / D Converter	18 μ s Typ.	350 ns (Current output)
16 bit D / A Converter	350 ns (Current output)	

■ Typical characteristics

● Ratings (MA6581)

Parameter	Rating	
Resolution	16 bits	
Non-linearity Error	± 2 LSB	
Conversion Time	A / D	18 μ s TYP
	D / A	350 ns.
Supply Voltage	5 V, -15 V	
Input / Output Code (serial)	A / D (Output Code)	Complimentary binary Complimentary offset binary
	D / A (Output Code)	Complimentary binary Complimentary offset binary
Input / Output Voltage	A / D (Input Voltage)	0 to 10. / 20 V (Unipolar) $\pm 5. / \pm 10$ V (Bipolar)
	D / A (Output Voltage)	0 to 10. / 20 V (Unipolar) $\pm 5. / \pm 10$ V (Bipolar)

Design, Specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use. Whenever a doubt about safety arises from this product, please inform us immediately for technical consultation without fail.

Recommended Applications

14 bit A / D Converter	EHK MA6590
SMD 14 bit A / D Converter	EHK MA6593
16 bit A / D Converter	EHK MA6581
16 bit D / A Converter	EHK MD6207

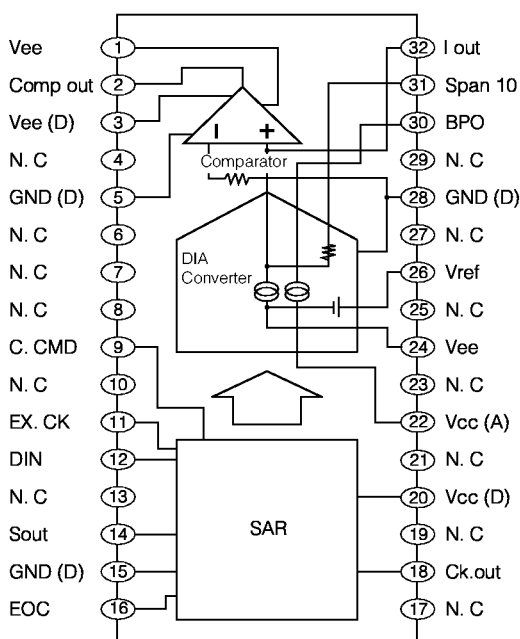
Recommended Applications

- Test equipment, Industrial controls, Robotics

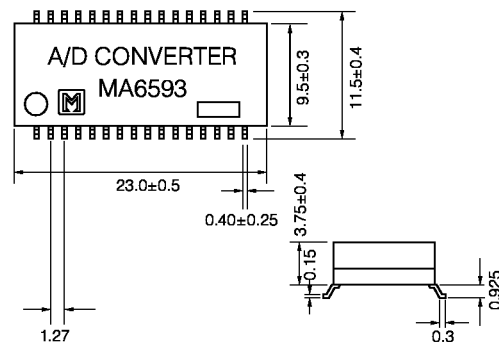
Block diagram

- EHK MA6593

(TOP VIEW)



- Dimensions in mm (not to scale)
DIL 32P Ceramic Package



Typical characteristics

- Ratings (MA6593)

Parameter		Rating
Resolution		14 bits
Non-linearity Error		± 1 LSB
Conversion Time	A / D	16 μs TYP
	D / A	350 ns.
Supply Voltage		5 V, -15 V
Input / Output Code (serial)	A / D (Output Code)	<ul style="list-style-type: none"> ● Binary ● Offset binary
	D / A (Output Code)	<ul style="list-style-type: none"> ● Binary ● Offset binary
Input / Output Voltage	A / D (Input Voltage)	0 to 10 V (Unipolar) ± 5 V (Bipolar)
	D / A (Output Voltage)	0 to 10 V (Unipolar) ± 5 V (Bipolar)

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