National Semiconductor

Semiconductors

MOS - Clock Drivers

MH0026C Two Phase Clock Driver

REFERENCE TABLE

Stock No.
31941B
31019R 31437R

GENERAL DESCRIPTION

The MH0028C is a low cost monolithic high speed two phase MOS clock driver and interface circuit. Unique circuit design along with advanced processing provide both very high speed operation and the ability to drive large capacitive loads. The device accepts standard TTL/DTL outputs and converts them to MOS logic levels. It may be driven from standard 54/74 series gates and flip-flops or from drivers such as the DM8830 or DM7440. The MH0025C is intended for applications in which the output pulse width is logically controlled: i.e., the output pulse width is equal to the input pulse width.

The MH0026C is intended to fulfil a wide variety of MOS interface requirements. As a MOS clock driver for long silicon gate shift registers, a single device can drive over 10k bits at 5MHz. Six devices provide input address and precharge drive for a 8k by 16 bit MM1103 RAM memory system.

FEATURES

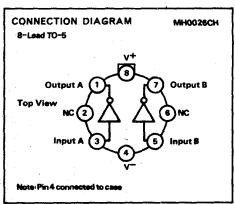
Fast rise and fall times—20ns with 1000pF load High output swing—20V High output current drive—±1.5 amps TTL/DTL compatible inputs High rep rate—5 to 10MHz depending on load Low power consumption in MOS 'O' state—2mW Drives to 0.4V of GND for RAM address drive The device is available in 8-lead TO-5, one watt

copper lead frame 8-pin mini-DIP, and one and a half watt TO-8 packages.

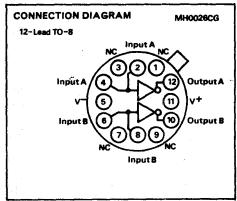
ABSOLUTE MAXIMUM RATINGS

V ⁺ -V ⁻ differential voltage 22V	
Input Current	100mA
Input voltage (VIN-V-	5.5V
Peak output current	1.5A
Operating temperature range MH0026C	0°C to 85°C
Storage temperature range	-65°C to +150°C
Lead temperature (Soldering, 10 sec)	300°C

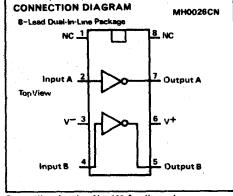
See Summary of Electrical Characteristics on page 1037.



See outline drawing No. 97 for dimensions.



See outline drawing No. 99 for dimensions.



See outline drawing No. 103 for dimensions.