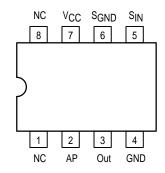
225MHz Prescaler

The MC12023 is a prescaler which will divide by 64. This device may be operated over a supply voltage range of 3.2 to 5.5V.

- 225MHz Toggle Frequency
- Low-Power 4.8mA Maximum at 5.5V
- Operating Supply Voltage of 3.2 to 5.5V
- · Connecting Pins 2 and 3 Allows Driving One TTL Load

Pinout: 8-Lead Plastic (Top View)



MAXIMUM RATINGS

Symbol	Characteristic	Range	Unit
Vcc	Power Supply Voltage	0 to +8.0	Vdc
T _A	Operating Temperature Range	0 to +70	°C
T _{stg}	Storage Temperature Range	-65 to +175	°C

ELECTRICAL CHARACTERISTICS ($V_{CC} = 3.2 \text{ to } 5.5 \text{V}$; $T_A = 0 \text{ to } +70 ^{\circ}\text{C}$)

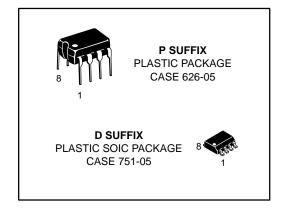
Symbol	Characteristic	Min	Тур	Max	Unit
f _{max} f _{min}	Toggle Frequency (Sine Wave Input)	225		35	MHz
ICC	Supply Current at 5.5V		3.5 3	4.8	mA
VOH	Output Voltage HIGH ¹ (V _{CC} = 3.2V) ²	1.2	1.4		V
VOH	Output Voltage HIGH ¹ (V _{CC} = 5.0V) ²	2.5			V
VOL	Output Voltage LOW ¹ (I _{sink} = 2.0mA)			0.5	V
V _{in}	Input Voltage Sensitivity 35MHz 50–225MHz	400 200		800 800	mVPP

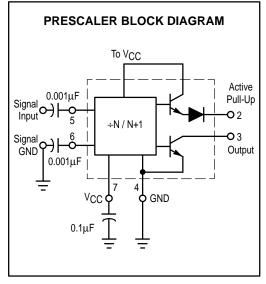
- 1 Pin 2 connected to Pin 3
- 2 $I_{\text{source}} = 50 \mu A$
- 3 $V_{CC} = 4.5V$

MC12023

MECL PLL COMPONENTS

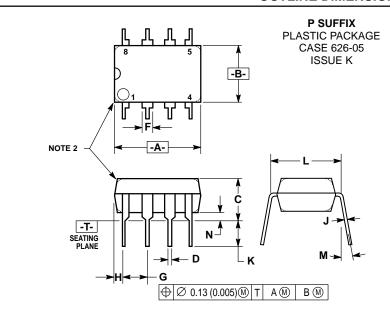
÷64 PRESCALER







OUTLINE DIMENSIONS

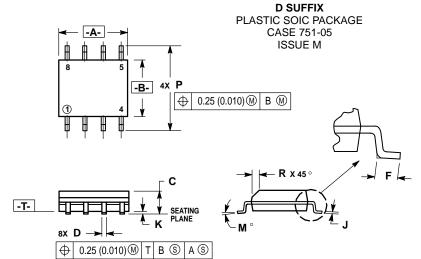


NOTES:

- 1. DIMENSION L TO CENTER OF LEAD WHEN FORMED PARALLEL.
- 2. PACKAGE CONTOUR OPTIONAL (ROUND OR
- SQUARE CORNERS).

 3. DIMENSIONING AND TOLERANCING PER ANSI Y14 5M 1982

	MILLIMETERS		INCHES	
DIM	MIN	MAX	MIN	MAX
Α	9.40	10.16	0.370	0.400
В	6.10	6.60	0.240	0.260
С	3.94	4.45	0.155	0.175
D	0.38	0.51	0.015	0.020
F	1.02	1.78	0.040	0.070
G	2.54 BSC		0.100 BSC	
Н	0.76	1.27	0.030	0.050
J	0.20	0.30	0.008	0.012
K	2.92	3.43	0.115	0.135
L	7.62 BSC		0.300 BSC	
М	_	10°	_	10°
N	0.76	1.01	0.030	0.040



NOTES:

- DIMENSIONING AND TOLERANCING PER
 ANSI Y14.5M. 1982.
- CONTROLLING DIMENSION: MILLIMETER
 DIMENSIONS A AND B DO NOT INCLUDE MOLD PROTRUSION.
- MOLD PROTRUSION.
 4. MAXIMUM MOLD PROTRUSION 0.15 (0.006)
- DIMENSION D DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL BE 0.127 (0.005) TOTAL IN EXCESS OF THE D DIMENSION AT MAXIMUM MATERIAL CONDITION.

	MULIMETERS INCHES			
	MILLIMETERS		INCHES	
DIM	MIN	MAX	MIN	MAX
Α	4.80	5.00	0.189	0.196
В	3.80	4.00	0.150	0.157
С	1.35	1.75	0.054	0.068
D	0.35	0.49	0.014	0.019
F	0.40	1.25	0.016	0.049
G	1.27 BSC		0.050 BSC	
J	0.18	0.25	0.007	0.009
K	0.10	0.25	0.004	0.009
M	0°	7°	0°	7°
Р	5.80	6.20	0.229	0.244
R	0.25	0.50	0.010	0.019

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