

## Product Overview

### MC12080: 1.1 GHz Prescaler

For complete documentation, see the data sheet.

The MC12080 is a single modulus divide by 10, 20, 40, 80 prescaler for low power frequency division of a 1.1 GHz high frequency input signal. Divide ratio control inputs SW1, SW2 and SW3 select the required divide ratio of 10, 20, 40, or 80. An external load resistor is required to terminate the output. An 820 Ohm resistor is recommended to achieve a 1.2 Vpp output swing, when dividing a 1.1 GHz input signal by the minimum divide by ratio of 10, assuming a 8.0 pF load. Output current can be minimized dependent on conditions such as output frequency, capacitive load being driven, and output voltage swing required. Typical values for load resistors are included in the Vout specification for various divide ratios at 1.1 GHz input frequency.

### Features

- 1.1 GHz Toggle Frequency
- Supply Voltage 4.5 to 5.5 V
- Low Power 3.7 mA Typical at VCC = 5.0 V
- Operating Temperature Range of -40° to 85°C
- Pb-Free Packages are Available

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Type	Input Level	Output Level	V <sub>CC</sub> Typ (V)	f <sub>Max</sub> Typ (MHz)	t <sub>pd</sub> Typ (ns)	t <sub>R</sub> & t <sub>F</sub> Max (ps)	Package Type
MC12080DG		Pb-free Halide free non AEC-Q and PPAP	Active	Prescaler	ECL	ECL	5	1100	-	-	SOIC-8
MC12080DR2G		Pb-free Halide free non AEC-Q and PPAP	Active	Prescaler	ECL	ECL	5	1100	-	-	SOIC-8

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