P/Active™ 1% Tolerance Series/Parallel Termination Network

Features

- Minimal Ground Bounce, Cross-Talk
- Stable 1% Absolute Tolerance elements
- 6 terminating lines per QSOP package
- Save board space and reduces assembly cost
- Minature 16-pin QSOP package

Applications

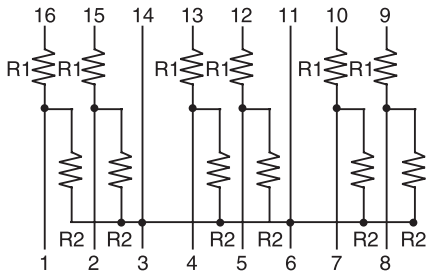
- High speed server and workstation terminations (DDR, SSTL, and NTL)

Product Description

High speed logic devices such as NTL demand unique, high speed bus terminations. The Series/Parallel Termination Network provides 6 terminating channels per package and optimizes signal integrity by reducing reflections and ringing. The termination is in standard values shown below and is ideal for use in NTL buses. The device features a flow through design for the series terminations. Ground-bounce and cross-talk are minimized using a proprietary die design which includes multiple die to package connections to the termination voltage. In addition, the resistors are trimmed to a tight absolute tolerance of 1%, which provides tight impedance-matching and results in greatly reduced reflections.

The Series/Parallel Termination Network provides high performance, superior reliability, and low cost through manufacturing efficiency. The termination resistor elements are fabricated using state-of-the-art thin film manufacturing technology, well known for its ability to achieve tight tolerances and precision matching. This integrated solution is silicon-based and has the same reliability characteristics as any of today's microprocessor products. The thin film resistors have very excellent stability over temperature, applied voltage, and life. In addition, the QSOP industry standard packaging is easy to handle in manufacturing, and enjoys the same high yields as typical semiconductor products.

SCHEMATIC CONFIGURATION



STANDARD PART ORDERING INFORMATION

R Code	Package		Ordering Part Number		
	Pins	Style	Tubes	Tape & Reel	Part Marking
001	16	QSOP	PAC002SPFQ/F	PAC002SPFQ/R	PAC002SPFQ

STANDARD SPECIFICATIONS

Absolute Tolerance (R1 & R2)	±1%
Ratio Tolerance	±1%
TCR	150ppm
Operating Temperature Range	–55°C to 125°C
Power Rating/Resistor	100mW
Crosstalk	20 mV typical

RESISTOR VALUES(Ω)*

R1(Ω)	R2(Ω)	Code
22	90	001

* Call California Micro Devices for other values.

C1140600