

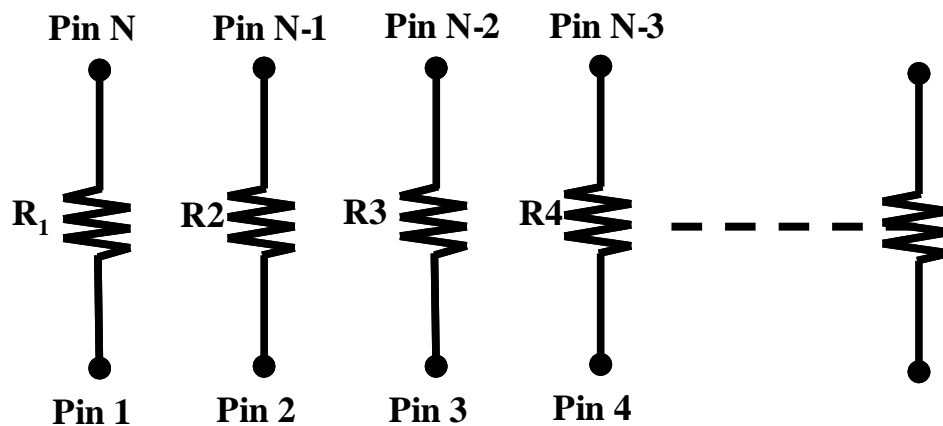
THIN FILM ISOLATED RESISTOR NETWORK

SiliconApps SARN110 precision resistor array offers a high degree of stability, low noise and the proven reliability characteristics of Tantalum Nitride films. These devices are offered in 4, 7, 8, 10 and 12 resistors per package and are manufactured using advanced Thin Film Technology. Packages used for these devices are QSOP. The JEDEC name for this package is SSOP. The package offers a 25-mil lead-pitch and the dimensions conform to industry standards. RoHS compliant products are also available.

The resistance range (per resistor) is 10Ω to 100KΩ.

Operating Temperature Range	-55°C to 150°C
Maximum Power Rating for each Resistor	100mW
Voltage	100V
Noise, Maximum (MIL-STD-202, Method 308)	-25dB
Absolute Tolerance at 25°C (optional)	± 0.1%
Ratio Tolerance at 25°C (optional)	± 0.05%
Temperature Coefficient of Resistance, ppm/°C	± 250
Typical Tracking TCR, ppm/°C	± 5

Electrical Schematics



Note:

1. “N” is the number of pins in the QSOP package
2. Number of Resistors per package = N/2

MECHANICAL	
Package Type	QSOP (JEDEC SSOP)
Lead Plating	Tin-Lead
Lead Material	Copper Alloy
Lead Co-planarity	0.004" (0.102mm)
Substrate Material	Silicon
Resistor Material	Tantalum Nitride
Body Material	Molded Epoxy
Flammability	UL94V-0

POWER (WATTS) DISSIPATION @ 70°C
1W (typical)

Part Number Designation					
SARN110	08	1001	F	A	P
Series	# of pins	R1 Res Value	Abs. Tolerance	TCR	Ratio Match
	08 = 8-pins	First 3 digits are significant value. Last digit represents number of zeros (Ex: 1001 = 1k-ohms). R indicates decimal point. (Ex: 10R0 = 10-ohms)	C = $\pm 0.1\%$	No letter = $\pm 250\text{ppm}/^\circ\text{C}$	No Letter = $\pm 1\%$
	14 = 14-pins		D = $\pm 0.5\%$	H = $\pm 100\text{ppm}/^\circ\text{C}$	P = $\pm 0.5\%$
	16 = 16-pins		F = $\pm 1\%$	A = $\pm 50\text{ppm}/^\circ\text{C}$	Q = $\pm 0.2\%$
	20 = 20-pins		G = $\pm 2\%$	B = $\pm 25\text{ppm}/^\circ\text{C}$	R = $\pm 0.1\%$
	24 = 24-pins		J = $\pm 5\%$		S = $\pm 0.05\%$
			K = $\pm 10\%$		
			M = $\pm 20\%$		

Packaging:

Parts will be shipped in tape&reel at 2,500/reel.

This document supercedes all previous specifications.

Please contact the factory for further details on this product.