

RC EQUALIZER NETWORK

ATC // AVX RC Equalizer Network

Features:

- EIA 0402 Case Size*
- Parallel Configurations
- Power Rating: 125 mW
- Operating Temperature: -55°C to +125°C
- Laser Trimmed Resistors
- RoHS Compliant

*Contact the factory for other EIA Sizes

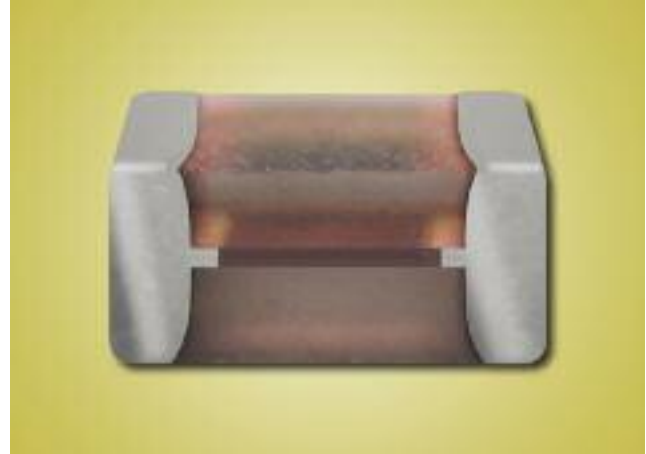
ATC // AVX Thin Film Technologies is pleased to introduce the Resistor Capacitor Network (RCN). This unique device provides an excellent RC network solution for RF equalization applications. The RCN is built in a single EIA package using our unique Glass wafer Sandwich Flexiterm (GSFT) Technology. It is supplied as a parallel RC combination network.

Resistor Material

Thin Film Resistors	TaN
Typical Sheet Resistivity (ohm/sq)	10 to 100
TCR (ppm/°C, -25 to 125°C)	-100 to -150
Stability (Change after 1000 hours @ 125°C)	1.0%

Specifications

RC	Detail
Package Size	EIA 0402
Design	Glass wafer sandwich
Termination	Flexiterm® (Ag/Epoxy), NiSn plated
Power Rating	125 mW
Operating Temperature Range	-55°C to +125°C
Tolerance	Resistor: 1-5%; Capacitor: 5-20%
Resistor Range	10 to 50 Ω (typical)
Capacitor Range	1 to 50 pF (typical)



Applications:

- Optical Transceiver Modules
- Broadband Receiver
- TOSA / ROSA

Markets:

- Opto-electronics
- Telecom
- Broadband Jamming for EW
- Military
- Instrumentation and Test

Capacitor Material

Material	SiON
pF/mm Typical	50 to 100
BDV (v/μm)	600
DF	≤0.1%
TCC (ppm/°C, -25 to 125°C)	±60

Kit Values

Part Number	Resistance (Ohms)	Capacitance (pF)
RCNL25R0F00R5KTT	25	0.5
RCNL25R0F01R0KTT	25	1.0
RCNL25R0F02R0KTT	25	2.0
RCNL25R0F03R0KTT	25	3.0
RCNL25R0F04R5KTT	25	4.5
RCNL25R0F05R0KTT	25	5.0
RCNL25R0F06R5KTT	25	6.5
RCNL25R0F11R0KTT	25	11

For other RC Combinations consult factory.



AMERICAN TECHNICAL CERAMICS

ATC // AVX Thin Film Technologies

ATC North America

tfsales@atceramics.com

sales@atceramics.com

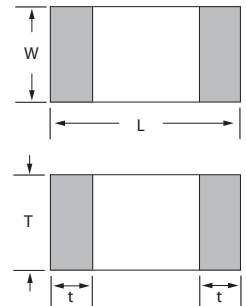
www.atceramics.com



ATC # 001-1131
Rev B, 7/14

RC EQUALIZER NETWORK

Mechanical Dimensions



Size (EIA)	Length (L)	Width (W)	Thickness (T)	Terminal (t)
0402	.039 ±.004 (1.00 ±0.10)	.020 ±.004 (0.50 ±0.10)	.020 ±.004 (0.50 ±0.10)	.010 ±.006 (0.25 ±0.15)

inches (mm)

Environmental Tests

Reliability Test	Criteria
Life Test	1000 Hrs. @ 125°C @ 50 mW
85/85 Temp./ Humidity Breakdown	1080 Hrs. @ 50 mW
Thermal Cycle	100 cycles @ -40 to 125°C
Termination Strength	200 g for 50 seconds (Dage Tester)

ATC Part Number Code

	ATC RCN	L	25R0	F	50R0	J	T	T	
Series									Packaging: T = Tape & Reel
Case Size - 0402									Termination T = NiSn Plated
Resistance Value (Ω) 3 significant digits R= decimal point									Capacitance Tolerance J=5%, K=10%, M=20%
Resistance Tolerance F= 1%									Capacitance Value (pF) 3 significant digits R= decimal point



The above part number code refers to an RCN, Case Size L, 25 Ohms, F (1%) resistance tolerance, 50 pF, J (5%) capacitance tolerance, T termination, with tape and reel packaging

ATC accepts orders for our parts using designations *with* or *without* the "ATC" prefix. Both methods of defining the part number are equivalent, i.e., part numbers referenced with the "ATC" prefix are interchangeable to parts referenced without the "ATC" prefix. Customers are free to use either in specifying or procuring parts from American Technical Ceramics.

Sales of ATC products are subject to the terms and conditions contained in American Technical Ceramics Corp. Terms and Conditions of Sale (ATC document #001-992 Rev. A 10/03). Copies of these terms and conditions will be provided upon request. They may also be viewed on ATC's website at www.atceramics.com/productfinder/default.asp. Click on the link for Terms and Conditions of Sale.

ATC has made every effort to have this information as accurate as possible. However, no responsibility is assumed by ATC for its use, nor for any infringements of rights of third parties which may result from its use. ATC reserves the right to revise the content or modify its product line without prior notice.

© 2013 American Technical Ceramics Corp. All Rights Reserved.

ATC # 001-1131, Rev B, 7/14



AMERICAN TECHNICAL CERAMICS

ATC // AVX Thin Film Technologies

ATC North America

tfsales@atceramics.com

sales@atceramics.com



www.atceramics.com