# 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

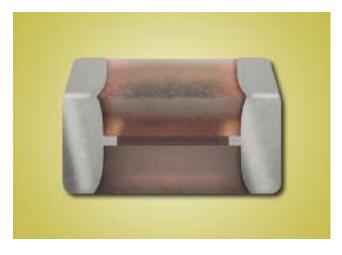
ATC // AVX Thin Film Technologies is pleased to introduce the Resistor Capacitor Network (RCN). This unique device provides an excellent RC network solution for RF equalization applications. The RCN is built in a single EIA package using our unique Glass wafer Sandwich Flexiterm (GSFT) Technology. It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



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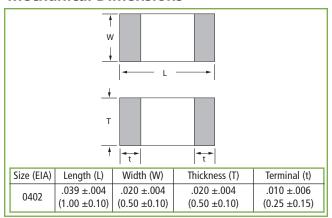
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HE ENGINEERS' CHOICETM ISO 9001 REGISTERED

<sup>\*</sup>Contact the factory for other EIA Sizes

# RC EQUALIZER NETWORK

#### **Mechanical Dimensions**

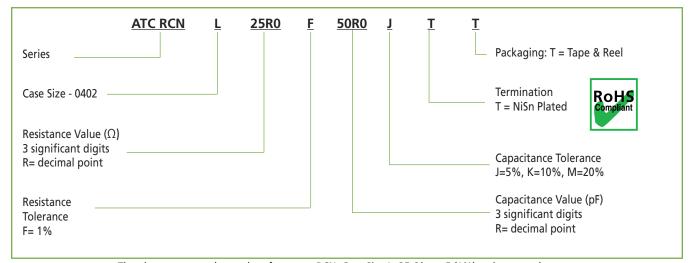


inches (mm)

#### **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**



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.

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



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