

# RC EQUALIZER NETWORK

## ATC // AVX RC Equalizer Network

### Features:

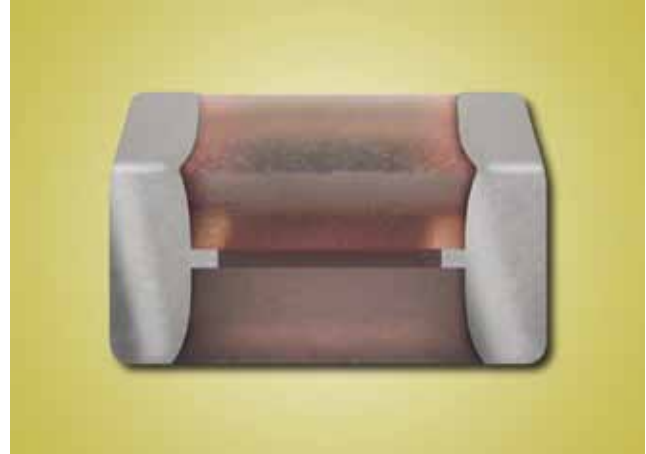
- EIA 0402 Case Size\*
- Resistance Range: 10 to 50  $\Omega$  typ.
- Capacitance Range: 1 to 50 pF typ.
- Parallel Configurations
- Power Rating: 125 mW
- Operating Temperature: -55°C to +125°C
- Laser Trimmed Resistors
- RoHS Compliant

\*For other RC Combinations and EIA Sizes contact factory

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.

### 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%
Resistance Range	10 to 50 $\Omega$ (typical)
Capacitance 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

### 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%

### Capacitor Material

Material	SiON
pF/mm Typical	50 to 100
BDV (v/ $\mu$ m)	600
DF	$\leq 0.1\%$
TCC (ppm/°C, -25 to 125°C)	$\pm 60$



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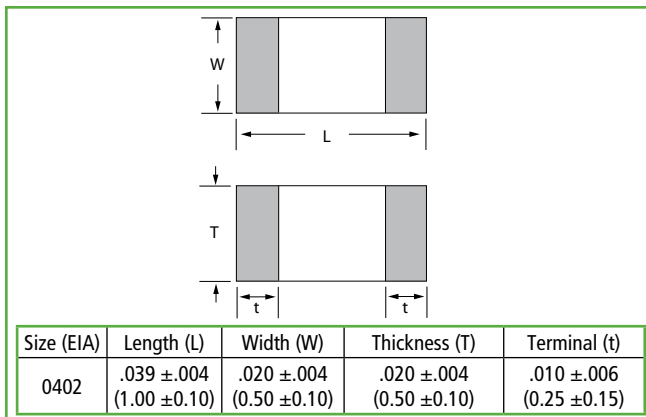
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ATC # 001-1131  
Rev C, 9/14

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## Mechanical Dimensions

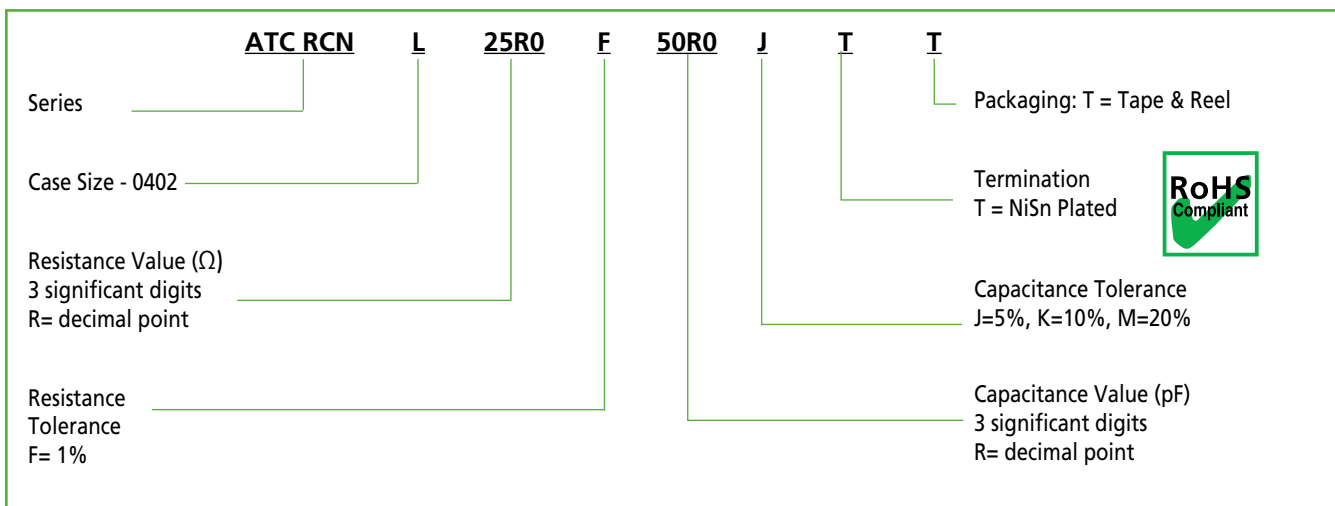


inches (mm)

## 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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