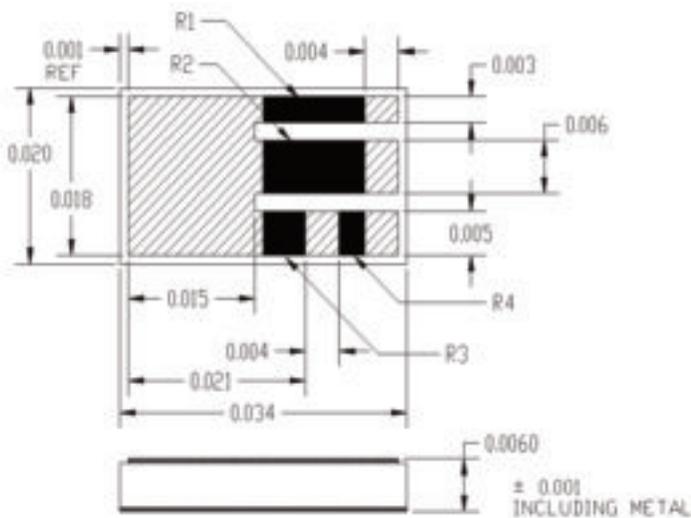


# Self Bias Network

## Functional Application

- Wireless communication modules
- MIC broadband high gain RF/Microwave modules
- Bias line voltage divider and integrated decoupling capacitor

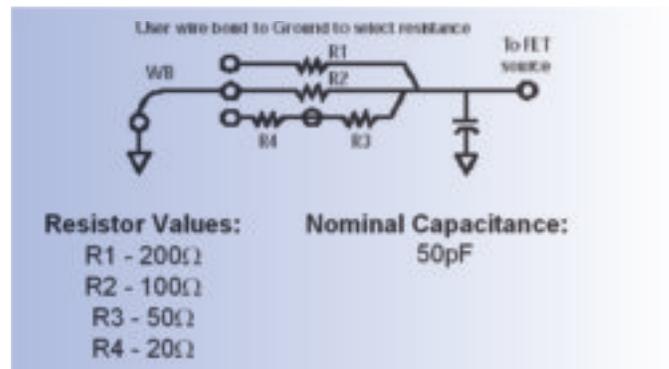
## Physical Characteristics



## Benefits

- Improves gain flatness and stability in GaAs FET
- Simplifies assembly with 1 component
- Miniature size: .020 x .034 (.5mm x .86mm)

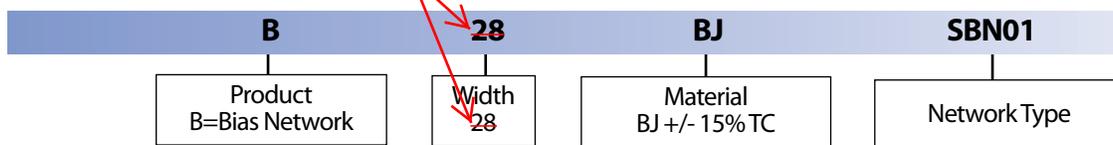
## Equivalent Schematic Representation



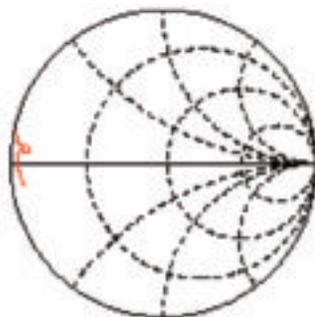
Typical application requires 2 networks

**Recommended Mounting:** The self Bias Network should be mounted with fully metalized side down directly on the RF ground plane for best performance.

## Product Number Identification

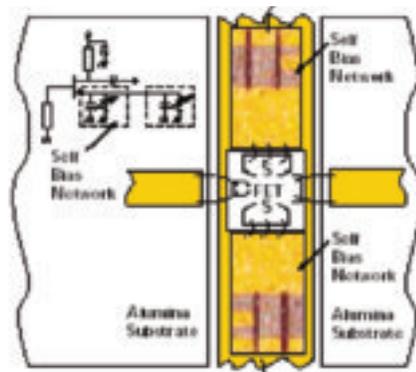


## Physical Characteristics



Typical S11  
 Frequency Range: 1.0 to 20 GHz  
 Reflection Coefficient: S11 Normalized

## Typical Application



Custom Networks can be designed per customer specification. Please consult factory for additional information or special requirements.



## Bias Filter Network

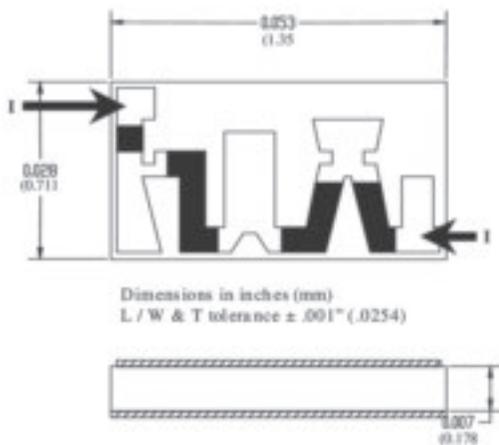
### Functional Application

- Wireless communication modules
- Ideal varactor decoupling element
- High gain RF/Microwave modules
- Ideal GaAs FET gate biasing device
- MMIC multichip modules

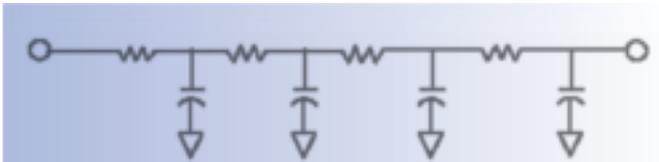
### Benefits

- Filters noise and RF from Supplies
- Reduces RF feedback through bias supplies
- Simplifies assembly - one component replaces many
- Designed with large 4 mil wirebond pads for assembly ease

### Physical Characteristics



### Equivalent Schematic Representation



**Total Series Resistance:**  
600 nominal

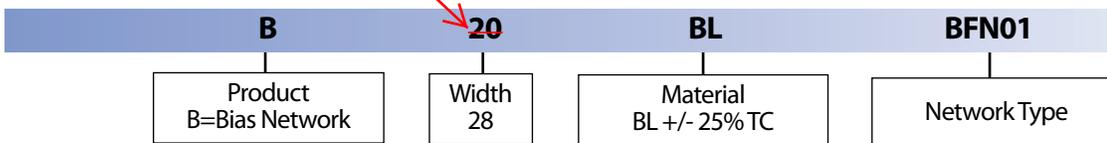
**Total Shunt Capacitance:**  
BT material - 140pF nominal BT?  
~~BH material - 95pF nominal~~

**DC Rating:** Volts Max: 50V **I(ma) Max: 10Ma**

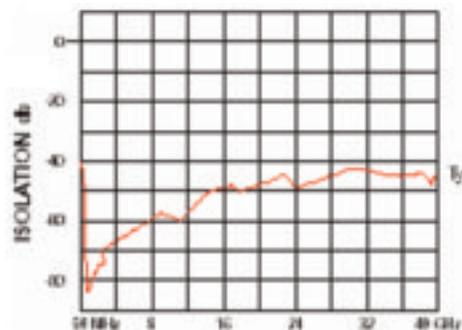
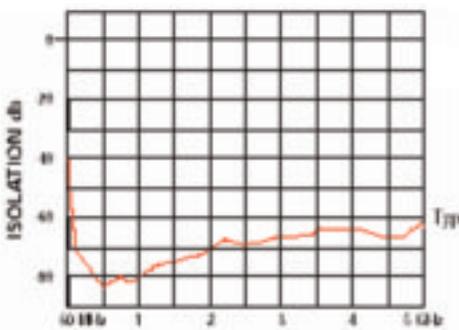
**Recommended Mounting:** The Bias Filter Network should be mounted with fully metallized side down directly on RF ground plane for maximum isolation performance.

28

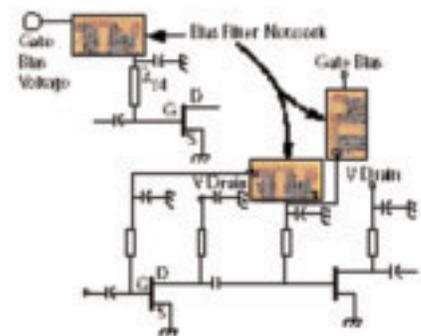
### Number Identification



### Isolation vs. Frequency



### Typical Application



Custom Networks can be designed per customer specification. Please consult factory for additional information or special requirements.