

# Bandpass Filter

## VBFZ-2130+

50Ω 2000 to 2260 MHz

### Maximum Ratings

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature   | -55°C to 100°C |
| RF Power Input*       | 7W at 25°C     |

\*Passband rating, derate linearly to 3W at 100°C ambient.  
Permanent damage may occur if any of these limits are exceeded.

### Features

- Good Rejection, 30dB up to 18GHz
- Low insertion loss
- Excellent power handling, 7W
- Temperature stable LTCC internal structure
- Rugged stainless steel unibody
- Protected by US Patent 6,943,646

### Applications

- Harmonic rejection
- Transmitters/receivers
- Lab use
- Test instrumentation



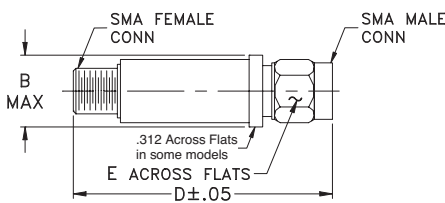
CASE STYLE: FF1145

| Connectors | Model        | Price       | Qty.  |
|------------|--------------|-------------|-------|
| SMA        | VBFZ-2130-S+ | \$39.95 ea. | (1-9) |

### +RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### Outline Drawing



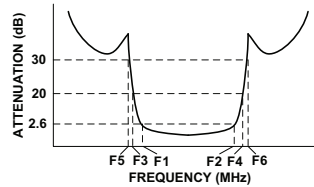
### Outline Dimensions (inch mm)

| B     | D     | E    | wt.   |
|-------|-------|------|-------|
| .410  | 1.91  | .312 | grams |
| 10.41 | 48.51 | 7.92 | 11.8  |

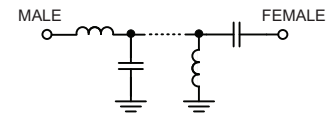
### Bandpass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

| CENTER FREQ. (MHz) | PASSBAND (MHz)<br>(Loss < 2.6dB) | STOPBANDS (MHz) |      |                 |              | VSWR (:1) |      |          |
|--------------------|----------------------------------|-----------------|------|-----------------|--------------|-----------|------|----------|
|                    |                                  | (Loss > 20dB)   |      | (Loss 30dB Typ) |              | Passband  |      | Stopband |
| Fc                 | F1 - F2                          | F3              | F4   | F5              | F6           | Typ.      | Max. | Typ.     |
| 2130               | 2000 - 2260                      | 1420            | 2950 | 1400            | 2950 - 18000 | 1.6       | 2.8  | 20       |

### Typical Frequency Response

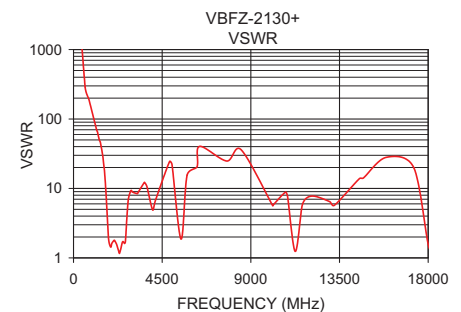
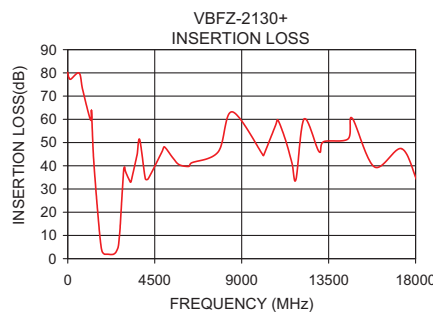


### Functional Schematic



### Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 50              | 79.71               | 9101.03   |
| 500             | 80.20               | 421.71    |
| 1010            | 59.20               | 108.86    |
| 1400            | 35.53               | 39.85     |
| 1420            | 33.32               | 36.94     |
| 1605            | 14.83               | 13.49     |
| 1684            | 7.90                | 5.68      |
| 1753            | 3.93                | 2.43      |
| 2000            | 1.92                | 1.74      |
| 2130            | 1.88                | 1.72      |
| 2260            | 1.76                | 1.32      |
| 2540            | 3.39                | 1.76      |
| 2635            | 6.41                | 1.75      |
| 2710            | 13.61               | 3.83      |
| 2795            | 25.49               | 7.28      |
| 2840            | 32.11               | 8.65      |
| 2950            | 39.28               | 9.32      |
| 7000            | 45.16               | 38.06     |
| 10000           | 44.11               | 5.21      |
| 18000           | 34.85               | 1.59      |



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