

# Surface Mount Bandpass Filter

## CBP-1645J+

50Ω      1622 to 1668 MHz

### The Big Deal

- Good Insertion Loss
- Low VSWR
- Miniature shielded package



Generic photo used for illustration purposes only  
CASE STYLE: MQ1770

### Product Overview

CBP-1645J+ is a ceramic coaxial resonator based bandpass filter in a shielded package fabricated using SMT technology. This filter has narrow passband and offers low insertion loss, low VSWR and high power handling for use in satellite communication.

### Key Features

Feature	Advantages
High Q	The CBP-1645J+ filter incorporates High-Q ceramic resonators that enables low insertion loss.
Low VSWR	This filter maintains typical VSWR over passband frequency range making this filter easier to integrate between other components.
Rugged construction	The CBP-1645J+ has been qualified over wide range of thermal, mechanical and environmental conditions including withstanding the stress of extensive solder reflow cycles.

#### Notes

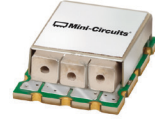
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### Features

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### Applications

- Satellite communication
- Radio astronomy

### Electrical Specifications at 25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	—	—	—	1645	—	MHz
	Insertion Loss	F1-F2	1622-1668	—	1.3	2.0	dB
	VSWR	F1-F2	1622-1668	—	1.5	2.32	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC-1520	20	27.7	—	dB
	VSWR	DC-F3	DC-1520	—	20	—	:1
Stop Band, Upper	Insertion Loss	F4-F5	1820-4000	20	27.1	—	dB
	VSWR	F4-F5	1820-4000	—	20	—	:1

### Maximum Ratings

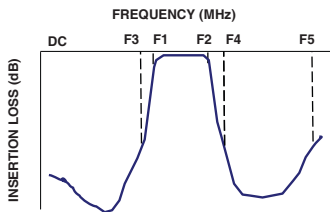
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	8 W

Permanent damage may occur if any of these limits are exceeded.

### Functional Schematic



### Typical Frequency Response

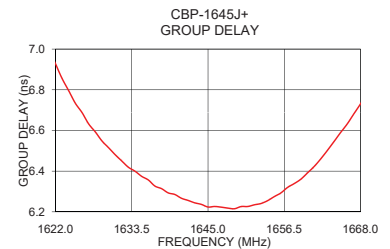
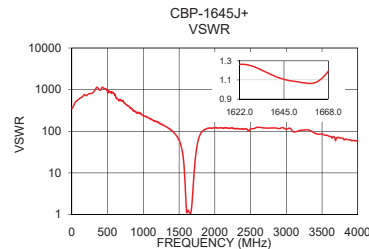
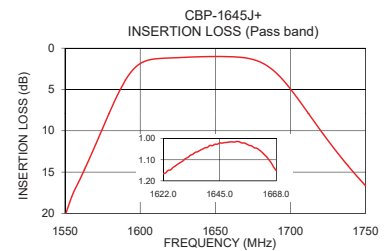
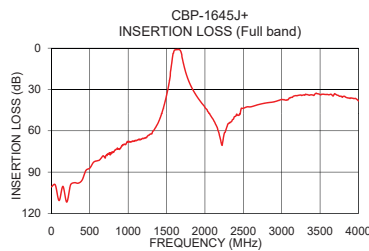


### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	100.66	350.26	1622	6.93
100	110.58	593.87	1624	6.80
400	95.75	968.56	1626	6.69
800	75.52	395.09	1628	6.59
1000	67.99	232.74	1630	6.52
1515	30.50	52.78	1632	6.45
1520	29.15	49.53	1636	6.36
1548	20.30	30.47	1638	6.31
1548	20.30	30.47	1640	6.29
1590	3.64	3.32	1642	6.26
1622	1.17	1.26	1644	6.24
1645	1.02	1.11	1646	6.23
1668	1.15	1.19	1650	6.23
1692	3.45	3.45	1654	6.26
1765	20.25	58.70	1658	6.34
1820	27.76	97.31	1660	6.39
1850	30.93	107.47	1662	6.46
2200	65.71	118.55	1664	6.55
3000	37.22	111.45	1666	6.63
4000	38.32	58.17	1668	6.73

### +RoHS Compliant

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