

**MONOLITHIC MICROWAVE SURFACE MOUNT
VARACTOR DIODES**

PRODUCT PREVIEW

DESCRIPTION

This series of surface mount Varactor diodes utilize new and unique monolithic MMSM technology. The technology is a package/device integration accomplished at the wafer fabrication level. Since the cathode and anode interconnections utilize precision photolithographic techniques rather than wire bonds, parasitic package inductance is tightly controlled. The package parasitics provide smooth non-resonant functionality through 12GHz.

KEY FEATURES

- Tape and Reeled for Automatic Assembly
- Low Series Inductance (<0.2nH typical)
- **Low Parasitic Capacitance (0.06 pf typical)**
- **Meets All Commercial Qualification Requirements**
- **0204 Outline**
- **Very low thermal resistance**

APPLICATIONS/BENEFITS

- **2.4 GHz PCS**
- **5.7 GHz Wireless LANS**
- **VCO's (Voltage Controlled Oscillator)**
- **Tunable Filter**
- **Widest bandwidth of any commercial surface mounted devices**
- **Ultra tight parametric distribution**

IMPORTANT: For the most current data, consult MICROSEMI's website: <http://www.microsemi.com>



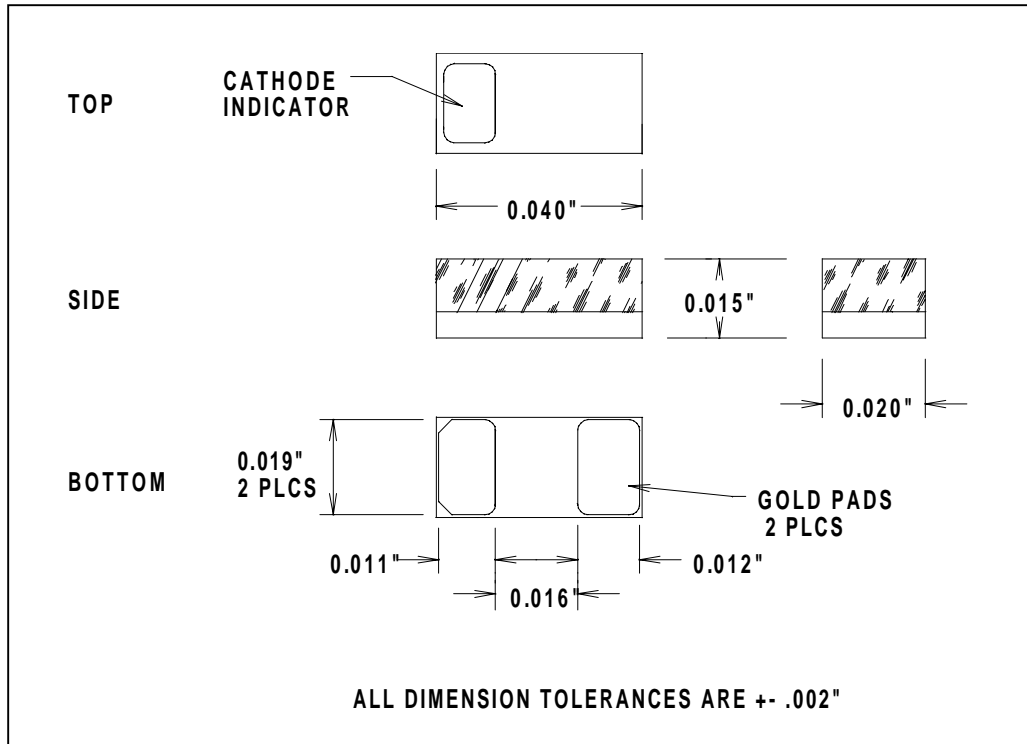
ELECTRICAL CHARACTERISTICS

Part #	Vb@10uA (min) Volts	Ct@1V (Pf)	Ct 1V/ Ct 3V (Pf)	Ct 1V/ Ct 6V (Pf)	Q (Min/4v/ 50MHz)	Outline Dwg Number	APPLICATION
MPV1965	15	2.6-3.8	1.4-2.2	2.6-3.6	1500	206	Low Voltage VCO

ELECTRICAL CHARACTERISTICS

Part #	Vb@10uA (min) Volts	Ct@4V Pf	Ct 0V/ (Typ) (Pf)	Ct @ 20V (Pf)	Q (Min/4v/ 50MHz)	Outline Dwg Number	APPLICATION
MPV2100	22	0.9-1.5	3.25	0.2-0.5	1500	206	Wide Bandwidth VCO

DIMENSIONS





MICROWAVE PRODUCTS DIVISION

MPV1965, MPV2100

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WWW.MICROSEMI.COM

NOTES