

## High Frequency SMD type antennas for BT/802.11b/g application 2.45 GHz size 5.3 × 2.0

### FEATURES

- Designed for 2.45 GHz ISM-band
- Simplifies antenna circuitry
- NiSn lead-free terminations
- Suitable for wave and reflow soldering
- Supplied in tape on reel.

### APPLICATIONS

- Telecommunications
- Computing (PCs, printers, PDAs)
- Wireless office data communications including WLAN
- Consumer electronics (wireless headphones).

### DESCRIPTION

This 2.45 GHz ceramic multilayer antenna has been designed to meet the requirements of the Bluetooth<sup>TM</sup>(1) and IEEE 802.11b/g wireless communications protocol. It consists of a rectangular block of low-dielectric ceramic material and is fabricated in a water-based non-toxic process. The antenna is capable of providing good connectivity using near 50 Ω microstrip directly onto the PC board.

### Notes

1. Bluetooth is a trademark owned by Telefonieaktiebolaget L M Ericsson, Sweden.

### QUICK REFERENCE DATA

DESCRIPTION	VALUE
Centre frequency	2.45 GHz 0 type/01 type/02 type/03 type/Default/04 type/05 type
Bandwidth	> 100 MHz
Gain	4 dBi max. (depends on the special environment)
VSWR	2.5 max. (depends on the special environment)
Polarization	Linear
Azimuth beam width	Omni-directional
Impedance	50 Ω
Power dissipation	1 W
Operating temperature	–55 to +85 °C
Terminations	NiSn
Resistance to soldering heat	260 °C for 10 seconds