K3313

Silicon Hyperabrupt Junction Varactor Diode

Rev. V1

Features

- Compact 1.27 x 1.7 x 0.09 mm SMT Package
- Uniform Capacitance / Temperature Coefficient
- Available on Tape and Reel



Description

The K3313 silicon hyperabrupt junction varactor diode is designed for use in voltage controlled oscillators (VCO's) with low tuning voltage operation.

Electrical Specifications: T_A = +25°C (unless otherwise specified)

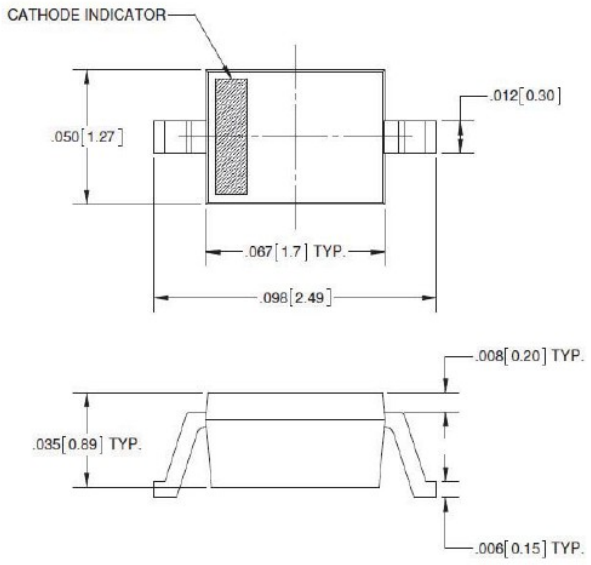
Parameter	Test Conditions	Units	Min.	Typ.	Max.
Voltage Breakdown	I_R = -10 µA, DC	V	12.0	—	—
Forward Voltage	I_F = 100 mA, DC	V	—	—	1.0
Total Capacitance	V_R = -1.0 V, 1 MHz V_R = -2.5 V, 1 MHz V_R = -4.0 V, 1 MHz	pF	20.0 8.5 4.0	—	22.0 8.5 4.6

Absolute Maximum Ratings[1,2]

Parameter	Absolute Maximum
Breakdown Voltage	12 Min. @ -10 µA
Moisture Sensitivity Level	1
Operating Temperature	-55°C to +125°C
Storage Temperature	-65°C to +200°C

1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. MACOM does not recommend sustained operation near these survivability limits.

Outline Drawing, SOD-323



Handling Procedures

Please observe the following precautions to avoid damage:

Static Sensitivity

These electronic devices are sensitive to electrostatic discharge (ESD) and can be damaged by static electricity. Proper ESD control techniques should be used when handling these Class 0 (HBM) devices.

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