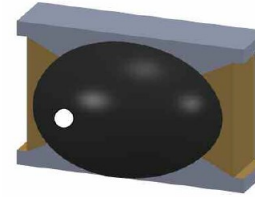


Features

- Low Capacitance
- Fast Switching
- Passivated Mesa Construction
- RoHS* Compliant

Description

The MPN7302-0805-2 silicon PIN diode features a fully passivated mesa design with tri-metalization for reliable operation under the most demanding conditions. This diode provides low capacitance and fast switching for switches, phase shifters, modulators and high speed attenuators.



0805-2

Electrical Specifications: $T_A = +25^\circ\text{C}$

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Voltage Breakdown	$I_R = 10 \mu\text{A}$	V	20	—	—
Junction Capacitance	$V_R = 10 \text{ V}, 1 \text{ MHz}$	pF	—	0.14	0.22
Parasitic Capacitance	—	pF	—	0.1	—
Parasitic Inductance	—	nH	—	0.3	—
Series Resistance	$I_F = 10 \text{ mA}, 500 \text{ MHz}$	Ω	—	1.2	1.5
Lifetime	$I_F = 10 \text{ mA}, I_R = 6 \text{ mA}$	ns	—	8	—

Ordering Information

Part Number	Package
MPN7302-0805-2	bulk

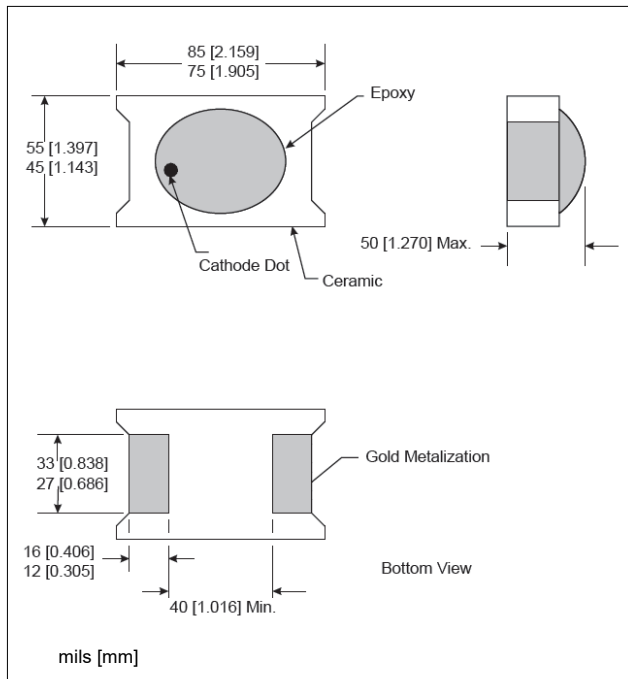
Absolute Maximum Ratings^{1,2}

Parameter	Absolute Maximum
Total Power Dissipation	0.5 Watts @ 25°C Derate linearly to zero @ +175°C
Operating Temperature	-65°C to +175°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.

* Restrictions on Hazardous Substances, compliant to current RoHS EU directive.

Outline (0805-2)



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 devices.

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