

MX51363-145 Datasheet Dual Anti-Parallel Pair Step Recovery Diodes

Features

- Low total capacitance ($C < 2.0\text{pF}$)
- High cut-off frequency
- High Stability
- Ceramic surface mount package
- RoHS compliant

Description

The MX51363-145 step recovery diodes are designed with epitaxial silicon which provides high output power and efficiency in harmonic generator application. It is manufactured using proven diode fabrication processes for high reproducibility. A unique silicon dioxide passivation process assures greater stability reliability and low leakage currents at high temperatures.

The diode is available in microstrip compatible ceramic substrate with copper leads.

Low total capacitance of the MX51363-145 enables the device to be used in active MRI switching.

This rugged device is capable of reliable operation in all military, commercial and industrial applications. The device is RoHS compliant.

Handling Procedures

These 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. ESD rating for this device is class 0 (HBM)

Environmental Capabilities

MX51363-145 anti parallel pair of step recovery diode is capable of meeting the environmental requirements of MIL-STD-750 and MIL-STD-883.

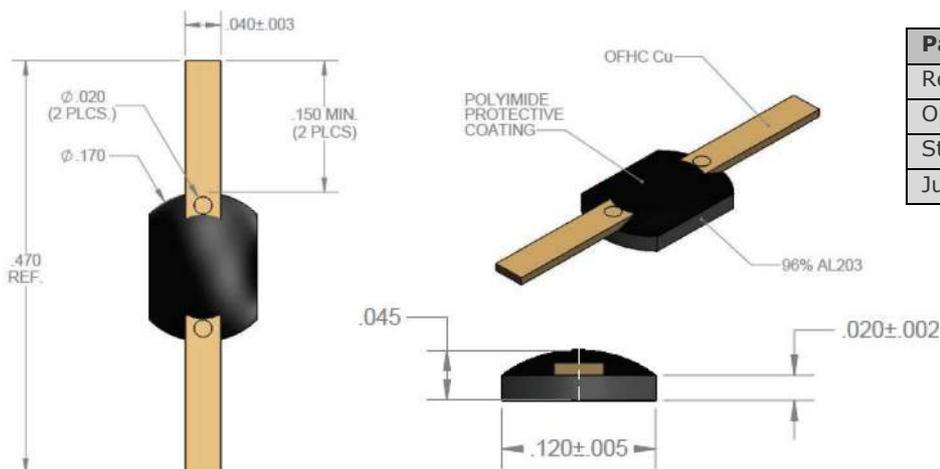
Assembly

The MX51363-145 Step recovery diode module is capable of being placed onto circuit boards with pick and place manufacturing equipment from tape and reel. The devices are attached to the circuit using conventional solder re-flow or wave soldering procedures with RoHS type or Sn63/Pb37 type solders

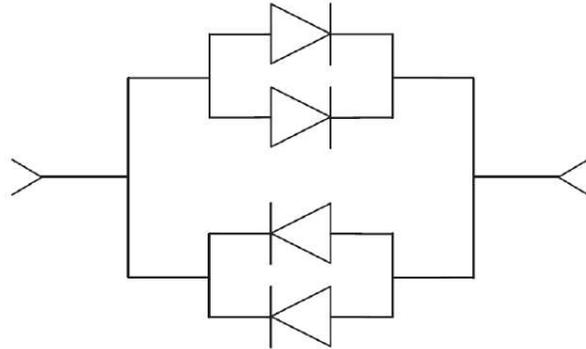
Specification

Parameter	Condition at 25°C	Min	Typ	Max	Units
Breakdown Voltage	$I_R = 10\mu\text{A}$	40	-	-	V
Total Capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$	-	-	2.0	pF
Forward Voltage	$I_F = 25\text{mA}$	-	915	-	mV

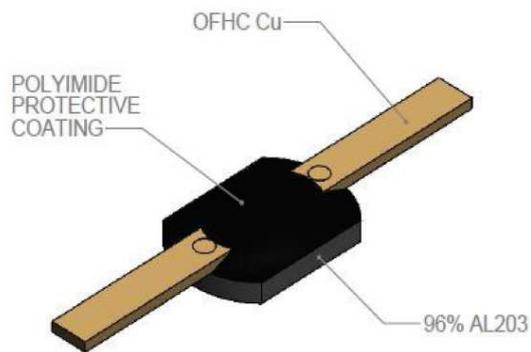
Dimensions



Functional Schematic



Case Style- CS145



Absolute Max Ratings

Parameter	Max
Reverse DC Voltage	40V
Operating Temp	-55°C to +150°C
Storage Temp	-65°C to +200°C
Junction Temp	150°C