

MADS-003000-1292 Series



Surface Mount Schottky Dual Crossover Quad

M/A-COM Products
Rev. V3

Features

- Designed for High Volume Applications
- Dual Crossover Quad Configuration
- Lead Free and RoHS* Compliant with 260°C Reflow Capability
- 100% Matte Tin Plating
- Available in SOT-26 (ODS-1292)
- Tape and Reel Deliverable

Description

M/A-COM's MADS-003000-1292LT and MADS-003000-1292HT are high performance silicon Schottky dual crossover quads. These parts are usable for a variety of mixer applications. The closely matched junctions minimize variation in capacitance, forward voltage and dynamic resistance within the four diodes in the quad. These diodes are available in a small profile surface mount package SOT-26 (ODS-1292). They are available in tape and reel for automatic pick and place assembly.

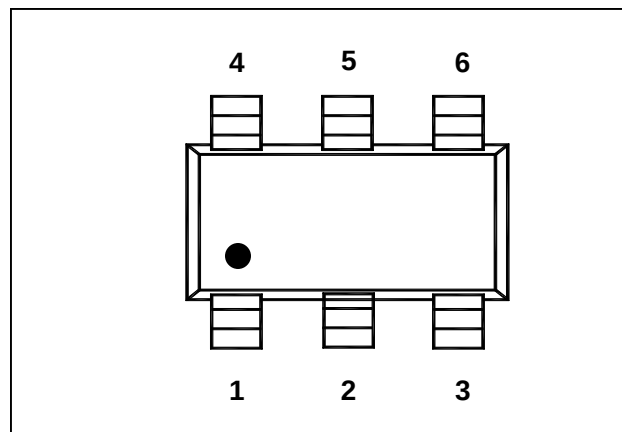
Associated Application Note

M538 - Surface Mount Instructions

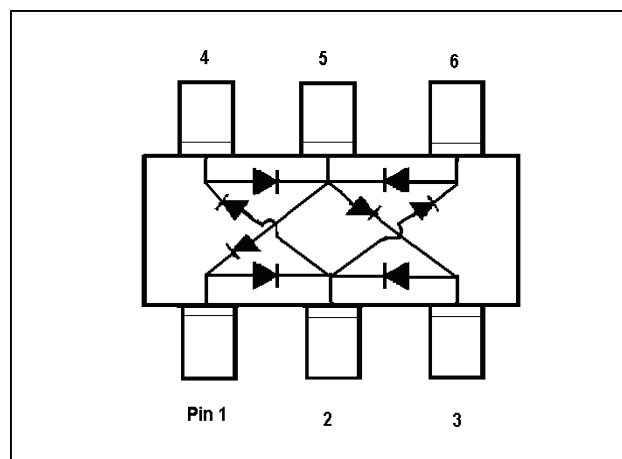
Ordering Information

Model Number	Package
MADS-003000-1292LT	Tape and Reel
MADS-003000-1292HT	Tape and Reel

SOT-26 Package (Top View)



Configuration (Top View)



* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

ADVANCED: Data Sheets contain information regarding a product M/A-COM is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

- **North America** Tel: 800.366.2266 / Fax: 978.366.2266
- **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300
- **Asia/Pacific** Tel: 81.44.844.8296 / Fax: 81.44.844.8298

Visit www.macom.com for additional data sheets and product information.

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Electrical Specifications @ +25°C

Part Number	Forward Voltage ¹			Junction Capacitance ²	Dynamic Resistance ³
	Vf Min. (mV)	Vf Max. (mV)	Delta Vf Max. (mV)		
MADS-003000-1292HT	515	600	10	.5	6.0
MADS-003000-1292LT	200	245	10	.5	7.0

1. Forward voltage is measured at $I_f = 1$ mA
2. C_j is measured at $V_r = 0$ volts and $f = 1$ MHz
3. R_d is measured @ $I_f = 9.5 - 10.5$ mA

Absolute Maximum Ratings @ 25°C ^{4,5}

Parameter	Absolute Maximum
Operating Temperature	-65°C to +125°C
Storage Temperature	-65°C to +125°C
Junction Temperature	+150°C
RF Incident Power (CW)	75 mW
Soldering Temperature	+260°C

4. Exceeding these limits may cause permanent damage.
5. ESD Precautions - Schottky diodes are ESD sensitive and can be damaged by static electricity. Proper ESD techniques must be used when handling these devices.

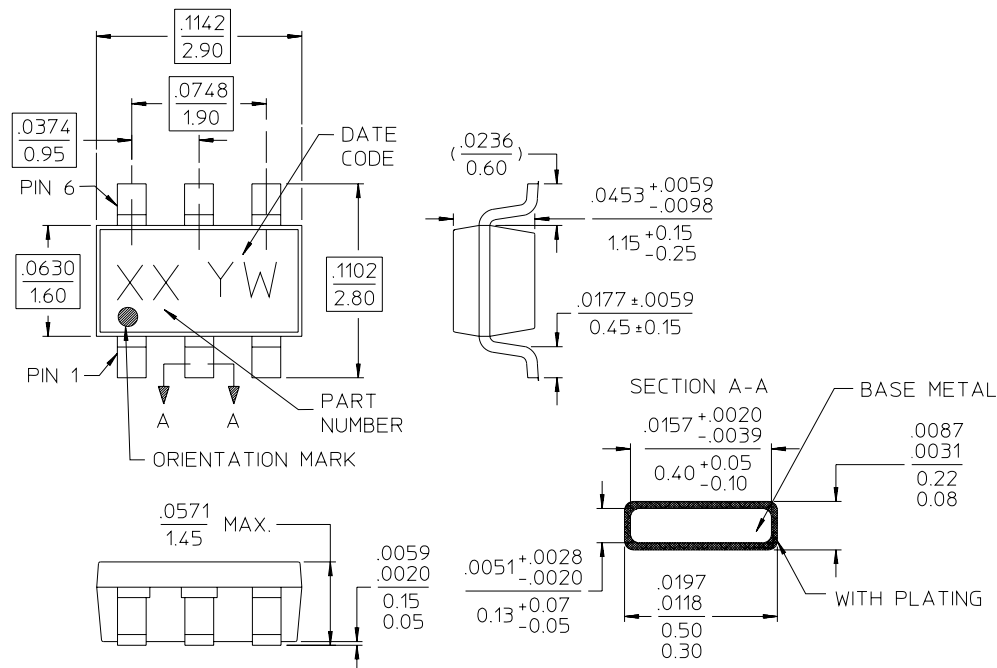
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Package Outline (SOT-26) ODS-1292



NOTES: 1. REFERENCE JEDEC MO-178-AB FOR ADDITIONAL DIMENSIONAL AND TOLERANCE INFORMATION.
2. REFERENCE M538 APPLICATION NOTE FOR PCB FOOTPRINT INFORMATION.
3. ALL DIMENSIONS SHOWN AS INCHES/MM.

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