

Step Recovery Diode

MSD700-12

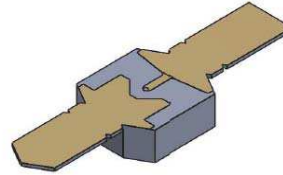


DESCRIPTION

The Aeroflex / Metelics MSD700-12 SRD (Step Recovery Diode) is a silicon Varactor which provides high output power and efficiencies in harmonic generator applications.

Features

- Low Transition Time
- High Efficiency



Maximum Ratings @ + 25°C (unless otherwise noted)

Rating	Limits	Units
Operating Temperature	-55 to +150	°C
Storage Temperature	-65 to +200	°C
ESD & MSL Ratings	Class 0 (Human Body Model) & MSL1	

Applications

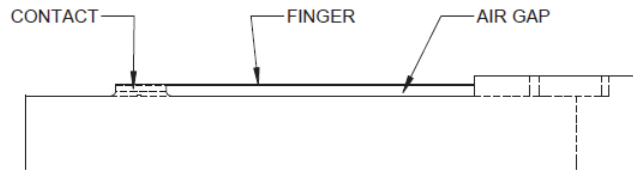
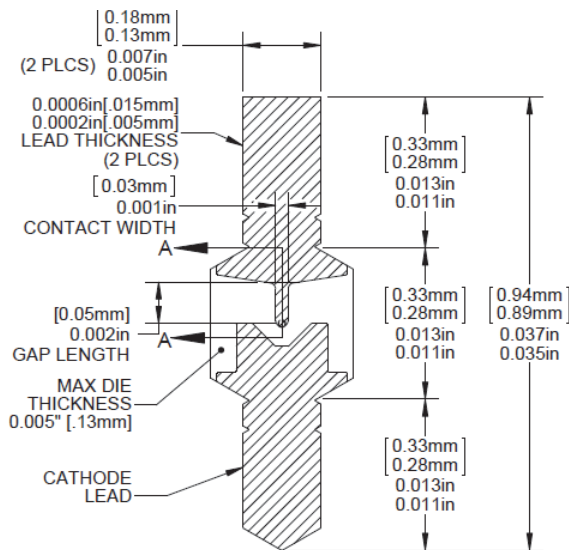
The MSD700-12 SRD is designed as a harmonic generator. Applications include: local oscillators, VCO's, frequency synthesizers and up converters. They are also used in comb generators to generate a broad frequency spectrum and in high speed pulse shaping circuits.

Electrical Characteristics $T_{CASE} = +25\text{ }^{\circ}\text{C}$

Part Number	Junction Capacitance C_J		Reverse Breakdown V_B	Carrier Lifetime T_L	Transition Time T_T	Series Resistance R_S	Thermal Resistance θ
	$V_R = 6\text{V}$		$I_R = 10\text{ }\mu\text{A}$	$I_R = 6\text{ mA}, I_F = 10\text{ mA}$		$I_F = 25\text{ mA}$	
	Minimum	Maximum	Minimum	Minimum	Maximum	Maximum	Maximum
	pF		V	ns	ps	Ohm	°C/W
MSD700-12	0.2	0.4	15	8	60	1.2	125



Outline Drawing (CS12)



SECTION A-A
RIGTH SIDE
SCALE 768 : 1

Aeroflex / Metelics, Inc.

ISO 9001:2008 certified companies

54 Grenier Field Road, Londonderry, NH 03053
Tel: (603) 641-3800
Sales: (888) 641-SEMI (7364)
Fax: (603)-641-3500

975 Stewart Drive, Sunnyvale, CA 94085
Tel: (408) 737-8181
Fax: (408) 733-7645

www.aeroflex.com/metelics

metelics-sales@aeroflex.com



Aeroflex / Metelics, Inc. reserves the right to make changes to any products and services herein at any time without notice. Consult Aeroflex or an authorized sales representative to verify that the information in this data sheet is current before using this product. Aeroflex does not assume any responsibility or liability arising out of the application or use of any product or service described herein, except as expressly agreed to in writing by Aeroflex; nor does the purchase, lease, or use of a product or service from Aeroflex convey a license under any patent rights, copyrights, trademark rights, or any other of the intellectual rights of Aeroflex or of third parties.

Copyright 2011 Aeroflex / Metelics. All rights reserved.



Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.