Advanced Design System 2011.01

Feburary 2011
Vendor Component Libraries - High-Frequency Diode Library

Acknowledgments

Mentor Graphics is a trademark of Mentor Graphics Corporation in the U.S. and other countries. Mentor products and processes are registered trademarks of Mentor Graphics Corporation. * Calibre is a trademark of Mentor Graphics Corporation in the US and other countries. "Microsoft®, Windows®, MS Windows®, Windows NT®, Windows 2000® and Windows Internet Explorer® are U.S. registered trademarks of Microsoft Corporation. Pentium® is a U.S. registered trademark of Intel Corporation. PostScript® and Acrobat® are trademarks of Adobe Systems Incorporated. UNIX® is a registered trademark of the Open Group. Oracle and Java and registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners. SystemC® is a registered trademark of Open SystemC Initiative, Inc. in the United States and other countries and is used with permission. MATLAB® is a U.S. registered trademark of The Math Works, Inc.. HiSIM2 source code, and all copyrights, trade secrets or other intellectual property rights in and to the source code in its entirety, is owned by Hiroshima University and STARC. FLEXlm is a trademark of Globetrotter Software, Incorporated. Layout Boolean Engine by Klaas Holwerda, v1.7 http://www.xs4all.nl/~kholwerd/bool.html . FreeType Project, Copyright (c) 1996-1999 by David Turner, Robert Wilhelm, and Werner Lemberg. QuestAgent search engine (c) 2000-2002, JObjects. Motif is a trademark of the Open Software Foundation. Netscape is a trademark of Netscape Communications Corporation. Netscape Portable Runtime (NSPR), Copyright (c) 1998-2003 The Mozilla Organization. A copy of the Mozilla Public License is at http://www.mozilla.org/MPL/ . FFTW, The Fastest Fourier Transform in the West, Copyright (c) 1997-1999 Massachusetts Institute of Technology. All rights reserved.

The following third-party libraries are used by the NlogN Momentum solver:

"This program includes Metis 4.0, Copyright © 1998, Regents of the University of Minnesota", http://www.cs.umn.edu/~metis , METIS was written by George Karypis (karypis@cs.umn.edu).

Intel@ Math Kernel Library, http://www.intel.com/software/products/mkl

SuperLU_MT version 2.0 - Copyright © 2003, The Regents of the University of California, through Lawrence Berkeley National Laboratory (subject to receipt of any required approvals from U.S. Dept. of Energy). All rights reserved. SuperLU Disclaimer: THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF

SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

7-zip - 7-Zip Copyright: Copyright (C) 1999-2009 Igor Pavlov. Licenses for files are: 7z.dll: GNU LGPL + unRAR restriction, All other files: GNU LGPL. 7-zip License: This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version. This library is distributed in the hope that it will be useful,but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details. You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA. unRAR copyright: The decompression engine for RAR archives was developed using source code of unRAR program.All copyrights to original unRAR code are owned by Alexander Roshal. unRAR License: The unRAR sources cannot be used to re-create the RAR compression algorithm, which is proprietary. Distribution of modified unRAR sources in separate form or as a part of other software is permitted, provided that it is clearly stated in the documentation and source comments that the code may not be used to develop a RAR (WinRAR) compatible archiver. 7-zip Availability: http://www.7-zip.org/

AMD Version 2.2 - AMD Notice: The AMD code was modified. Used by permission. AMD copyright: AMD Version 2.2, Copyright © 2007 by Timothy A. Davis, Patrick R. Amestoy, and Iain S. Duff. All Rights Reserved. AMD License: Your use or distribution of AMD or any modified version of AMD implies that you agree to this License. This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version. This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details. You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA Permission is hereby granted to use or copy this program under the terms of the GNU LGPL, provided that the Copyright, this License, and the Availability of the original version is retained on all copies.User documentation of any code that uses this code or any modified version of this code must cite the Copyright, this License, the Availability note, and "Used by permission." Permission to modify the code and to distribute modified code is granted, provided the Copyright, this License, and the Availability note are retained, and a notice that the code was modified is included. AMD Availability: http://www.cise.ufl.edu/research/sparse/amd

UMFPACK 5.0.2 - UMFPACK Notice: The UMFPACK code was modified. Used by permission. UMFPACK Copyright: UMFPACK Copyright © 1995-2006 by Timothy A. Davis. All Rights Reserved. UMFPACK License: Your use or distribution of UMFPACK or any modified version of UMFPACK implies that you agree to this License. This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License

Errata The ADS product may contain references to "HP" or "HPEESOF" such as in file names and directory names. The business entity formerly known as "HP EEsof" is now part of Agilent Technologies and is known as "Agilent EEsof". To avoid broken functionality and to maintain backward compatibility for our customers, we did not change all the names and labels that contain "HP" or "HPEESOF" references.

Warranty The material contained in this document is provided "as is", and is subject to being changed, without notice, in future editions. Further, to the maximum extent permitted by applicable law, Agilent disclaims all warranties, either express or implied, with regard to this documentation and any information contained herein, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. Agilent shall not be liable for errors or for incidental or consequential damages in connection with the furnishing, use, or performance of this document or of any information contained herein. Should Agilent and the user have a separate written agreement with warranty terms covering the material in this document that conflict with these terms, the warranty terms in the separate agreement shall control.

Technology Licenses The hardware and/or software described in this document are furnished under a license and may be used or copied only in accordance with the terms of such license. Portions of this product include the SystemC software licensed under Open Source terms, which are available for download at http://systemc.org/ . This software is redistributed by Agilent. The Contributors of the SystemC software provide this software "as is" and offer no warranty of any kind, express or implied, including without limitation warranties or conditions or title and non-infringement, and implied warranties or conditions merchantability and fitness for a particular purpose. Contributors shall not be liable for any damages of any kind including without limitation direct, indirect, special, incidental and consequential damages, such as lost profits. Any provisions that differ from this disclaimer are offered by Agilent only.

Restricted Rights Legend U.S. Government Restricted Rights. Software and technical data rights granted to the federal government include only those rights customarily provided to end user customers. Agilent provides this customary commercial license in Software and technical data pursuant to FAR 12.211 (Technical Data) and 12.212 (Computer Software) and, for the Department of Defense, DFARS 252.227-7015 (Technical Data - Commercial Items) and DFARS 227.7202-3 (Rights in Commercial Computer Software or Computer Software Documentation).

High-Frequency Diode Library

The High-Frequency Diode Library consists of nonlinear models representing 164 diodes from 7 manufacturers. The DIODEs available for selection from the Schematic window are:

- Agilent Technologies Diodes
- Hitachi Diodes
- Motorola Diodes
- Philips Diodes
- Siemens Diodes
- Sony Diodes
- Toshiba Diodes

> **Note**
> The library itself is a binary file named HfDiodeLibrary.library which can be found in $HPEESOF_DIR/ComponentLibs/models.

Agilent Technologies Diodes

The Agilent Technologies Diodes include 83 components, representing individual parts. The naming convention for these components is *di_hp*<part number><extraction date> .

Component Name	Description
di_hp_HBAT540B_20000301	HBAT540B: SOT323 Package 3-terminal, HBAT-540x single
di_hp_HSMS282C_20000301	HSMS282C: SOT323 Package 3-terminal, HSMS-282x series pair
di_hp_HSMS281E_20000301	HSMS281E: SOT323 Package 3-terminal, HSMS-281x common anode pair
di_hp_HSMS286C_20000301	HSMS286C: SOT323 Package 3-terminal, HSMS-286x series pair
di_hp_HSMS282K_20000301	HSMS282K: SOT363 Package 6-terminal, HSMS-282x High isolation unconnected pair
di_hp_HSMS2800_20000301	HSMS2800: SOT23 Package 3-terminal, HSMS-280x single
di_hp_HSMS286K_20000301	HSMS286K: SOT363 Package 6-terminal, HSMS-286x High isolation unconnected pair
di_hp_HSMS8202_20000301	HSMS8202: SOT23 Package 3-terminal, HSMS-820x series pair
di_hp_HSMS2824_20000301	HSMS2824: SOT23 Package 3-terminal, HSMS-282x common cathode pair
di_hp_HSMS2808_20000301	HSMS2808: SOT143 Package 4-terminal, HSMS-280x bridge quad
di_hp_HSMS2864_20000301	HSMS2864: SOT23 Package 3-terminal, HSMS-286x common cathode pair
di_hp_HSMS270C_20000301	HSMS270C: SOT323 Package 3-terminal, HSMS-270x series
di_hp_HBAT540C_20000301	HBAT540C: SOT323 Package 3-terminal, HBAT-540x series
di_hp_HSMS281F_20000301	HSMS281F: SOT323 Package 3-terminal, HSMS-281x common cathode pair
di_hp_HSMS282L_20000301	HSMS282L: SOT363 Package 6-terminal, HSMS-282x unconnected trio
di_hp_HSMS280P_20000301	HSMS280P: SOT363 Package 6-terminal, HSMS-280x bridge quad
di_hp_HSMS286L_20000301	HSMS286L: SOT363 Package 6-terminal, HSMS-286x unconnected trio
di_hp_HSMS2825_20000301	HSMS2825: SOT143 Package 4-terminal, HSMS-282x unconnected pair
di_hp_HSMS2817_20000301	HSMS2817: SOT143 Package 4-terminal, HSMS-281x ring quad

di_hp_HSMS2865_20000301	HSMS2865: SOT143 Package 4-terminal, HSMS-286x unconnected pair
di_hp_HSMS282E_20000301	HSMS282E: SOT323 Package 3-terminal, HSMS-282x common anode pair
di_hp_HSMS286E_20000301	HSMS286E: SOT323 Package 3-terminal, HSMS-286x common anode pair
di_hp_HSMS282M_20000301	HSMS282M: SOT363 Package 6-terminal, HSMS-282x common cathode quad
di_hp_HSMS2810_20000301	HSMS2810: SOT23 Package 3-terminal, HSMS-281x single
di_hp_HSMS2802_20000301	HSMS2802: SOT23 Package 3-terminal, HSMS-280x series
di_hp_HSMS2850_20000301	HSMS2850: SOT23 Package 3-terminal, HSMS-285x single
di_hp_HSMS2818_20000301	HSMS2818: SOT143 Package 4-terminal, HSMS-281x bridge quad
di_hp_HSMS280B_20000301	HSMS280B: SOT323 Package 3-terminal, HSMS-280x single
di_hp_HSMS282F_20000301	HSMS282F: SOT323 Package 3-terminal, HSMS-282x common cathode pair
di_hp_HSMS286F_20000301	HSMS286F: SOT323 Package 3-terminal, HSMS-286x common cathode pair
di_hp_HSMS282N_20000301	HSMS282N: SOT363 Package 6-terminal, HSMS-282x common anode quad
di_hp_HSMS280R_20000301	HSMS280R: SOT363 Package 6-terminal, HSMS-280x ring quad
di_hp_HSMS2803_20000301	HSMS2803: SOT23 Package 3-terminal, HSMS-280x common anode pair
di_hp_HSMS8205_20000301	HSMS8205: SOT143 Package 4-terminal, HSMS-820x unconnected pair
di_hp_HSMS285P_20000301	HSMS285P: SOT363 Package 6-terminal, HSMS-285x bridge quad
di_hp_HSMS2827_20000301	HSMS2827: SOT143 Package 4-terminal, HSMS-282x ring quad
di_hp_hsms2818_19930908	hsms2818: SOT143, SCHOTTKY if(max)=35, Vr(max)=20, P(max)=250, General RF
di_hp_HSMS280C_20000301	HSMS280C: SOT323 Package 3-terminal, HSMS-280x series pair
di_hp_HSMS280K_20000301	HSMS280K: SOT363 Package 6-terminal, HSMS-280x High isolation unconnected pair
di_hp_HSMS8101_20000301	HSMS8101: SOT23 Package 3-terminal, HSMS-820x single
di_hp_HSMS2820_20000301	HSMS2820: SOT23 Package 3-terminal, HSMS-282x single
di_hp_HSMS2812_20000301	HSMS2812: SOT23 Package 3-terminal, HSMS-281x series pair
di_hp_HSMS2804_20000301	HSMS2804: SOT23 Package 3-terminal, HSMS-280x common cathode pair
di_hp_HSMS2860_20000301	HSMS2860: SOT23 Package 3-terminal, HSMS-286x single
di_hp_HSMS2852_20000301	HSMS2852: SOT23 Package 3-terminal, HSMS-285x series
di_hp_HSMS2828_20000301	HSMS2828: SOT143 Package 4-terminal, HSMS-282x bridge quad
di_hp_HSMS281B_20000301	HSMS281B: SOT323 Package 3-terminal, HSMS-281x single
di_hp_HSMS285B_20000301	HSMS285B: SOT323 Package 3-terminal, HSMS-285x single
di_hp_HSMS280L_20000301	HSMS280L: SOT363 Package 6-terminal, HSMS-280x unconnected trio
di_hp_HSMS2700_20000301	HSMS2700: SOT23 Package 3-terminal, HSMS-270x single
di_hp_HSMS282P_20000301	HSMS282P: SOT363 Package 6-terminal, HSMS-282x bridge quad
di_hp_HBAT5400_20000301	HBAT5400: SOT23 Package 3-terminal, HBAT-540x single
di_hp_HSMS2813_20000301	HSMS2813: SOT23 Package 3-terminal, HSMS-281x common anode pair
di_hp_HSMS2805_20000301	HSMS2805: SOT143 Package 4-terminal, HSMS-280x unconnected pair
di_hp_HSMS286P_20000301	HSMS286P: SOT363 Package 6-terminal, HSMS-286x bridge quad
di_hp_HSMS8207_20000301	HSMS8207: SOT143 Package 4-terminal, HSMS-820x ring quad
di_hp_HSMS2829_20000301	HSMS2829: SOT143 Package 4-terminal, HSMS-282x crossover quad
di_hp_HSMS281C_20000301	HSMS281C: SOT323 Package 3-terminal, HSMS-281x series pair
di_hp_HSMS280E_20000301	HSMS280E: SOT323 Package 3-terminal, HSMS-280x common anode pair
di_hp_HSMS285C_20000301	HSMS285C: SOT323 Package 3-terminal, HSMS-285x series pair

di_hp_HSMS281K_20000301	HSMS281K: SOT363 Package 6-terminal, HSMS-281x High isolation unconnected pair
di_hp_HSMS280M_20000301	HSMS280M: SOT363 Package 6-terminal, HSMS-280x common cathode quad
di_hp_HSMS2822_20000301	HSMS2822: SOT23 Package 3-terminal, HSMS-282x series
di_hp_HSMS2814_20000301	HSMS2814: SOT23 Package 3-terminal, HSMS-281x common cathode pair
di_hp_hsms2805_19930908	hsms2805: SOT143, SCHOTTKY if(max)=15, Vr(max)=70, P(max)=250, General RF
di_hp_HSMS2862_20000301	HSMS2862: SOT23 Package 3-terminal, HSMS-286x series
di_hp_HSMS282B_20000301	HSMS282B: SOT323 Package 3-terminal, HSMS-282x single
di_hp_HSMS280F_20000301	HSMS280F: SOT323 Package 3-terminal, HSMS-280x common cathode pair
di_hp_HSMS286B_20000301	HSMS286B: SOT323 Package 3-terminal, HSMS-286x single
di_hp_HSMS281L_20000301	HSMS281L: SOT363 Package 6-terminal, HSMS-281x unconnected trio
di_hp_HSMS280N_20000301	HSMS280N: SOT363 Package 6-terminal, HSMS-280x common anode quad
di_hp_HSMS285L_20000301	HSMS285L: SOT363 Package 6-terminal, HSMS-285x unconnected trio
di_hp_HSMS2702_20000301	HSMS2702: SOT23 Package 3-terminal, HSMS-270x series
di_hp_HSMS282R_20000301	HSMS282R: SOT363 Package 6-terminal, HSMS-282x ring quad
di_hp_HBAT5402_20000301	HBAT5402: SOT23 Package 3-terminal, HBAT-540x series
di_hp_HSMS2823_20000301	HSMS2823: SOT23 Package 3-terminal, HSMS-282x common anode pair
di_hp_HSMS2815_20000301	HSMS2815: SOT143 Package 4-terminal, HSMS-281x unconnected pair
di_hp_HSMS2807_20000301	HSMS2807: SOT143 Package 4-terminal, HSMS-280x ring quad
di_hp_HSMS286R_20000301	HSMS286R: SOT363 Package 6-terminal, HSMS-286x ring quad
di_hp_HSMS8209_20000301	HSMS8209: SOT143 Package 4-terminal, HSMS-820x cross over quad
di_hp_HSMS2863_20000301	HSMS2863: SOT23 Package 3-terminal, HSMS-286x common anode pair
di_hp_HSMS2855_20000301	HSMS2855: SOT143 Package 4-terminal, HSMS-285x unconnected pair
di_hp_HSMS270B_20000301	HSMS270B: SOT323 Package 3-terminal, HSMS-270x single

Hitachi Diodes

The Hitachi Diodes include 11 components, representing individual parts. The naming convention for these components is *di_hit<part number><extraction date>.*

Component Name	Description
di_hit_1ss166_19930908	1ss166: UMD, SCHOTTKY if(max)=15, Vr(max)=10, P(max)=150, CATV Mixer
di_hit_hsm2694_19930908	hsm2694: SOT23, PN if(max)=NA, Vr(max)=35, P(max)=150, Tuner Band Switch
di_hit_hsm88as_19930908	hsm88as: SOT23, SCHOTTKY if(max)=15, Vr(max)=10, P(max)=NA, CATV Mixer
di_hit_hsu277_19930908	hsu277: URP, PN if(max)=NA, Vr(max)=NA, P(max)=NA, NA
di_hit_hsr276_19930908	hsr276: SRP, SCHOTTKY if(max)=30, Vr(max)=3, P(max)=NA, Tuner Mixer
di_hit_hvu306a_19930908	hvu306a: URP, PN if(max)=NA, Vr(max)=NA, P(max)=NA, NA
di_hit_hsk120_19930908	hsk120: LLD, PN if(max)=150, Vr(max)=60, P(max)=NA, High Speed Switching
di_hit_hvm14s_19930908	hvm14s: SOT23, PN if(max)=50, Vr(max)=50, P(max)=100, VHF/UHF Attenuator
di_hit_hvu202_19930908	hvu202: URP, PN if(max)=NA, Vr(max)=NA, P(max)=NA, NA
di_hit_hsb88ws_19930908	hsb88ws: MOP, SCHOTTKY if(max)=15, Vr(max)=10, P(max)=150, CATV Mixer
di_hit_hsm276s_19930908	hsm276s: SOT23, SCHOTTKY if(max)=30, Vr(max)=3, P(max)=NA, CATV Mixer

Motorola Diodes

The Motorola Diodes include 40 components, representing individual parts. The naming convention for these components is *di_mot*<part number><*extraction date*> .

Component Name	Description
di_mot_mmbv3102l_19930908	mmbv3102l: SOT23, PN if(max)=200, Vr(max)=30, P(max)=200, VHF Tuning
di_mot_mbd101_19930908	mbd101: 182-02, SCHOTTKY if(max)=NA, Vr(max)=4, P(max)=280, UHF Mixer
di_mot_1n5444a_19930908	1n5444a: 51-02, PN if(max)=NA, Vr(max)=30, P(max)=400, Tuning, UHF
di_mot_baw56lt1_19930908	baw56lt1: SOT23, PN if(max)=NA, Vr(max)=70, P(max)=NA, Low Current Switching
di_mot_mmbv109l_19930908	mmbv109l: SOT23, PN if(max)=200, Vr(max)=30, P(max)=200, VHF Tuning
di_mot_mmbv2101l_19930908	mmbv2101l: SOT23, PN if(max)=200, Vr(max)=30, P(max)=200, FM/TV Tuning
di_mot_mmbv2105l_19930908	mmbv2105l: SOT23, PN if(max)=200, Vr(max)=30, P(max)=200, FM/TV Tuning
di_mot_mmbv2109l_19930908	mmbv2109l: SOT23, PN if(max)=200, Vr(max)=30, P(max)=200, FM/TV Tuning
di_mot_mv2115_19930908	mv2115: 182-02, PN if(max)=200, Vr(max)=30, P(max)=280, FM/TV Tuning
di_mot_mv2107_19930908	mv2107: 182-02, PN if(max)=200, Vr(max)=30, P(max)=280, FM/TV Tuning
di_mot_1n5453a_19930908	1n5453a: 51-02, PN if(max)=NA, Vr(max)=30, P(max)=400, Tuning, UHF
di_mot_mv7005t1_19930908	mv7005t1: SOT223, PN if(max)=50, Vr(max)=15, P(max)=280, High Capacitance Tuning
di_mot_bav99lt1_19930908	bav99lt1: SOT23, PN if(max)=NA, Vr(max)=70, P(max)=NA, Low Current Switching
di_mot_mmbd353lt1_19930908	mmbd353lt1: SOT23, SCHOTTKY if(max)=NA, Vr(max)=4, P(max)=225, UHF-VHF Mixer/Detector

di_mot_mv2109_19930908	mv2109: 182-02, PN if(max)=200, Vr(max)=30, P(max)=280, FM/TV Tuning
di_mot_1n5139a_19930908	1n5139a: 51-02, PN if(max)=250, Vr(max)=60, P(max)=400, Tuning, UHF
di_mot_mv7404t1_19930908	mv7404t1: SOT223, PN if(max)=NA, Vr(max)=NA, P(max)=NA, NA
di_mot_1n5148_19930908	1n5148: 51-02, PN if(max)=250, Vr(max)=60, P(max)=400, Tuning, UHF
di_mot_bav70lt1_19930908	bav70lt1: SOT23, PN if(max)=50, Vr(max)=70, P(max)=NA, Low Current Switching
di_mot_mmbv105gl_19930908	mmbv105gl: SOT23, PN if(max)=200, Vr(max)=30, P(max)=200, VHF Tuning
di_mot_mmbv409l_19930908	mmbv409l: SOT23, PN if(max)=200, Vr(max)=20, P(max)=225, VHF Tuning
di_mot_mmbv609l_19930908	mmbv609l: SOT23, PN if(max)=100, Vr(max)=20, P(max)=225, FM Tuning
di_mot_mmbv809l_19930908	mmbv809l: SOT23, PN if(max)=20, Vr(max)=20, P(max)=225, Tuning, 900 MHz
di_mot_mv409_19930908	mv409: 182-02, PN if(max)=200, Vr(max)=20, P(max)=280, VHF Tuning
di_mot_mv2111_19930908	mv2111: 182-02, PN if(max)=200, Vr(max)=30, P(max)=280, FM/TV Tuning
di_mot_mmbd101l_19930908	mmbd101l: SOT23, SCHOTTKY if(max)=NA, Vr(max)=4, P(max)=280, UHF Mixer
di_mot_mmbd301l_19930908	mmbd301l: SOT23, SCHOTTKY if(max)=NA, Vr(max)=30, P(max)=280, UHF-VHF Detector
di_mot_mbd301_19930908	mbd301: 182-02, SCHOTTKY if(max)=NA, Vr(max)=30, P(max)=280, UHF-VHF Detector
di_mot_mv2112_19930908	mv2112: 182-02, PN if(max)=200, Vr(max)=30, P(max)=280, FM/TV Tuning
di_mot_mv2104_19930908	mv2104: 182-02, PN if(max)=200, Vr(max)=30, P(max)=280, FM/TV Tuning
di_mot_bas16t_19930908	bas16t: SOT23, PN if(max)=50, Vr(max)=75, P(max)=NA, Low Current Switching
di_mot_bal99lt1_19930908	bal99lt1: SOT23, PN if(max)=50, Vr(max)=70, P(max)=NA, Low Current Switching
di_mot_mv104_19930908	mv104: 29-04, PN if(max)=200, Vr(max)=32, P(max)=280, FM Tuning
di_mot_mv209_19930908	mv209: 182-02, PN if(max)=200, Vr(max)=30, P(max)=280, VHF Tuning
di_mot_mmbd352l_19930908	mmbd352l: SOT23, SCHOTTKY if(max)=NA, Vr(max)=4, P(max)=225, UHF-VHF Mixer/Detector
di_mot_mv2113_19930908	mv2113: 182-02, PN if(max)=200, Vr(max)=30, P(max)=280, FM/TV Tuning
di_mot_mv2105_19930908	mv2105: 182-02, PN if(max)=200, Vr(max)=30, P(max)=280, FM/TV Tuning
di_mot_mmbd354lt1_19930908	mmbd354lt1: SOT23, SCHOTTKY if(max)=NA, Vr(max)=4, P(max)=NA, UHF-VHF Mixer/Detector
di_mot_1n5456a_19930908	1n5456a: 51-02, PN if(max)=NA, Vr(max)=30, P(max)=400, Tuning, UHF
di_mot_mmbv432l_19930908	mmbv432l: SOT23, PN if(max)=200, Vr(max)=14, P(max)=350, FM Tuning

Philips Diodes

The Philips Diodes include 4 components, representing individual parts. The naming convention for these components is *di_phl<part number><extraction date>* .

Component Name	Description
di_phl_bb219_19930908	bb219: SOD80, PN if(max)=20, Vr(max)=30, P(max)=NA, VHF Tuning
di_phl_bb804_19930908	bb804: SOT23, PN if(max)=50, Vr(max)=18, P(max)=NA, FM Tuning
di_phl_bby31_19930908	bby31: SOT23, PN if(max)=20, Vr(max)=28, P(max)=NA, UHF Tuning
di_phl_bb215_19930908	bb215: SOD80, PN if(max)=20, Vr(max)=30, P(max)=NA, UHF Tuning

Siemens Diodes

The Siemens Diodes include 19 components, representing individual parts. The naming convention for these components is *di_sms*<part number><*extraction date*> .

Component Name	Description
di_sms_bb833_19930908	bb833: SOD323, PN if(max)=20, Vr(max)=30, P(max)=NA, RF Tuning
di_sms_bb639_19930908	bb639: SOD323, PN if(max)=20, Vr(max)=30, P(max)=NA, RF Tuning
di_sms_bb640_19930908	bb640: SOD323, PN if(max)=20, Vr(max)=30, P(max)=NA, RF Tuning
di_sms_bb535_19930908	bb535: SOD323, PN if(max)=20, Vr(max)=30, P(max)=NA, VHF Tuning
di_sms_bat64_19930908	bat64: SOT23, SCHOTTKY if(max)=200, Vr(max)=30, P(max)=230, Bias Isolation, Clamping
di_sms_bav99_19930908	bav99: SOT23, SCHOTTKY if(max)=250, Vr(max)=70, P(max)=330, High Speed Switching
di_sms_bas70_19930908	bas70: SOT23, SCHOTTKY if(max)=15, Vr(max)=70, P(max)=NA, General Purpose RF
di_sms_bas70_04_19930908	bas70_04: SOT23, SCHOTTKY if(max)=15, Vr(max)=70, P(max)=NA, General Purpose RF
di_sms_bb619_19930908	bb619: SOD123, PN if(max)=20, Vr(max)=30, P(max)=NA, VHF/CATV Tuning
di_sms_bat15_099r_19930908	bat15_099r: SOT143, SCHOTTKY if(max)=110, Vr(max)=NA, P(max)=NA, NA
di_sms_bb620_19930908	bb620: SOD123, PN if(max)=20, Vr(max)=30, P(max)=NA, TV/VTR Tuning
di_sms_bas40_04_19930908	bas40_04: SOT23, SCHOTTKY if(max)=40, Vr(max)=40, P(max)=NA, General Purpose RF
di_sms_bb515_19930908	bb515: SOD123, PN if(max)=20, Vr(max)=30, P(max)=NA, VHF Tuning
di_sms_bas40_19930908	bas40: SOT23, SCHOTTKY if(max)=40, Vr(max)=40, P(max)=NA, General Purpose RF
di_sms_bb831_19930908	bb831: SOD323, PN if(max)=20, Vr(max)=30, P(max)=NA, RF Tuning
di_sms_bat14_099r_19930908	bat14_099r: SOT143, SCHOTTKY if(max)=90, Vr(max)=NA, P(max)=NA, NA
di_sms_bat62_19930908	bat62: SOT143, SCHOTTKY if(max)=20, Vr(max)=40, P(max)=NA, NA
di_sms_bby51_19930908	bby51: SOT23, PN if(max)=20, Vr(max)=7, P(max)=NA, RF Tuning
di_sms_bas125_19930908	bas125: SOT23, SCHOTTKY if(max)=40, Vr(max)=40, P(max)=NA, NA

Sony Diodes

The Sony Diodes include 4 components, representing individual parts. The naming

convention for these components is *di_sny*<part number><*extraction date*> .

Component Name	Description
di_sny_1t33_19930908	1t33: M205, PN if(max)=NA, Vr(max)=30, P(max)=NA, CATV Tuning
di_sny_1t362_19930908	1t362: SOD323, PN if(max)=NA, Vr(max)=30, P(max)=NA, VHF-UHF Tuning
di_sny_1t363_19930908	1t363: SOD323, PN if(max)=NA, Vr(max)=30, P(max)=NA, CATV Tuning
di_sny_1t32_19930908	1t32: M205, PN if(max)=NA, Vr(max)=30, P(max)=NA, VHF-UHF Tuning

Toshiba Diodes

The Toshiba Diodes include 3 components, representing individual parts. The naming convention for these components is *di_tsb*<part number><*extraction date*> .

Component Name	Description
di_tsb_1sv186_19930908	1sv186: 1-2J1A, PN if(max)=NA, Vr(max)=30, P(max)=NA, UHF Tuning
di_tsb_1sv214_19930908	1sv214: SOD323, PN if(max)=NA, Vr(max)=30, P(max)=NA, TV Tuning
di_tsb_1sv215_19930908	1sv215: SOD323, PN if(max)=NA, Vr(max)=30, P(max)=NA, CATV Tuning