

HIGH-RELIABILITY PRODUCTS

Features

- Low dynamic impedance
- Hermetically sealed
- 5 Watt applications
- Low reverse leakage currents
- Small package

Specification

- Quick reference data

$V_R = 6.8V - 300V$
 $I_Z (MAX) = 15.6mA - 700mA$
 $Z_Z = 1\Omega - 950\Omega$
 $I_R = 2\mu A - 150\mu A$

Description

These products are qualified to MIL-PRF-19500/356.
 They can be supplied as JAN, JANTX, JANTXV and JANS grades.

Outline Drawing



DIM	Dimensions				Note
	Inches		Millimeters		
	MIN	MAX	MIN	MAX	
A	0.085	0.140	2.16	3.56	-
B	1.00	1.30	25.4	33.0	-
C	0.140	0.185	3.56	4.70	-
D ¹	-	0.030	-	0.8	1
E	0.036	0.042	0.91	1.07	-

Notes:

(1): Lead diameter uncontrolled over this region.

Figure 1: Outline Dimensions

Electrical Characteristics (T_A=25°C unless otherwise specified)

Device Types	V _Z Nom	V _Z Min	V _Z Max	I _Z Test Current T _A =+25°C	Z _Z Imped.	Z _K Knee Imped.	I _Z Max DC Current	V _Z (reg) Voltage Reg.	I _{ZSM} @ T _A =+25°C	V _R Reverse Voltage	I _R Reverse Current DC	αV _Z Temp Coeff.	I _R Reverse Current DC T _A =+150°C	I _{ZK} Test current
	V	V	V	mA	Ω	Ω	mA	V	A	V	μA	%/°C	μA	mA
1N4954	6.8	6.46	7.14	175	1	1000	700	0.7	29.3	5.2	150	0.05	750	1
1N4955	7.5	7.13	7.87	175	1.5	800	630	0.7	26.4	5.7	100	0.06	500	1
1N4956	8.2	7.79	8.61	150	1.5	600	580	0.7	24	6.2	50	0.06	300	1
1N4957	9.1	8.65	9.55	150	2	400	520	0.7	22	6.9	25	0.06	200	1
1N4958	10	9.5	10.5	125	2	125	475	0.8	20	7.6	25	0.07	200	1
1N4959	11	10.45	11.55	125	2.5	130	430	0.8	19	8.4	10	0.07	150	1
1N4960	12	11.4	12.6	100	2.5	140	395	0.8	18	9.1	10	0.07	150	1
1N4961	13	12.35	13.65	100	3	145	365	0.9	16	9.9	10	0.08	150	1
1N4962	15	14.25	15.75	75	3.5	150	315	1	12	11.4	5	0.08	100	1
1N4963	16	15.2	16.8	75	3.5	155	294	1.1	10	12.2	5	0.08	100	1
1N4964	18	17.1	18.9	65	4	160	264	1.2	9	13.7	5	0.085	100	1
1N4965	20	19	21	65	4.5	165	237	1.5	8	15.2	2	0.085	100	1
1N4966	22	20.9	23.1	50	5	170	216	1.8	7	16.7	2	0.085	100	1
1N4967	24	22.8	25.2	50	5	175	198	2	6.5	18.2	2	0.09	100	1
1N4968	27	25.7	28.3	50	6	180	176	2	6	20.6	2	0.09	100	1
1N4969	30	28.5	31.5	40	8	190	158	2.5	5.5	22.8	2	0.09	100	1
1N4970	33	31.4	34.6	40	10	200	144	2.8	5	25.1	2	0.095	100	1
1N4971	36	34.2	37.8	30	11	220	132	3	4.5	27.4	2	0.095	100	1
1N4972	39	37.1	40.9	30	14	230	122	3	4	29.7	2	0.095	100	1
1N4973	43	40.9	45.1	30	20	240	110	3.3	3.5	32.7	2	0.095	100	1
1N4974	47	44.7	49.3	25	25	250	100	3.5	3.2	35.8	2	0.095	100	1
1N4975	51	48.5	53.5	25	27	270	92	4	3	38.8	2	0.095	100	1
1N4976	56	53.2	58.8	20	35	320	84	4.4	2.8	42.6	2	0.095	100	1
1N4977	62	58.9	65.1	20	42	400	76	5	2.5	47.1	2	0.1	100	1
1N4978	68	64.6	71.4	20	50	500	70	5.5	2.2	51.7	2	0.1	100	1
1N4979	75	71.3	78.7	20	55	620	63	6	2	56	2	0.1	100	1
1N4980	82	77.9	86.1	15	80	720	58	6.6	1.8	62.2	2	0.1	100	1
1N4981	91	86.5	95.5	15	90	760	52.5	7.5	1.6	69.2	2	0.1	100	1
1N4982	100	95	105	12	110	800	47.5	8	1.4	76	2	0.1	100	1
1N4983	110	104.5	115.5	12	125	1000	43	9	1.2	83.6	2	0.1	100	1
1N4984	120	114	126	10	170	1150	39.5	10	1	91.2	2	0.1	100	1
1N4985	130	123.5	136.5	10	190	1250	36.6	11	0.8	98.8	2	0.105	100	1
1N4986	150	142.5	157.5	8	330	1500	31.6	13	0.75	114	2	0.105	100	1
1N4987	160	152	168	8	350	1650	29.4	14	0.7	121.6	2	0.105	100	1
1N4988	180	171	189	5	450	1750	26.4	16	0.6	136.8	2	0.11	100	1
1N4989	200	190	210	5	500	1850	23.6	18	0.5	152	2	0.11	100	1

Device Types	V _Z Nom	V _Z Min	V _Z Max	I _Z Test Current T _A =+25°C	Z _Z Imped.	Z _K Knee Imped.	I _Z Max DC Current	V _Z (reg) Voltage Reg.	I _{ZSM} @ T _A =+25°C	V _R Reverse Voltage	I _R Reverse Current DC	αV _Z Temp Coeff.	I _R Reverse Current DC T _A =+150°C	I _{ZK} Test current
	V	V	V	mA	Ω	Ω	mA	V	A	V	μA	%/°C	μA	mA
1N4990	220	209	231	5	550	2000	21.6	19	0.5	167	2	0.115	100	1
1N4991	240	228	252	5	650	2050	19.8	22	0.4	182	2	0.115	100	1
1N4992	270	257	283	5	800	2100	17.5	25	0.35	206	2	0.12	100	1
1N4993	300	285	315	4	950	2150	15.6	28	0.3	228	2	0.12	100	1

Notes:

(1): Operating Temperature: -55°C to 175°C

(2): Storage Temperature: -65°C to 175°C

Ordering Information

Part Number	Description
1N4954 THRU 1N4993	Axial leaded hermetically sealed ⁽¹⁾

Notes:

(1): Available in bulk or tape and reel packaging. Please consult factory for quantities.



Important Notice

Information relating to this product and the application or design described herein is believed to be reliable, however such information is provided as a guide only and Semtech assumes no liability for any errors in this document, or for the application or design described herein. Semtech reserves the right to make changes to the product or this document at any time without notice. Buyers should obtain the latest relevant information before placing order and should verify that such information is current and complete. Semtech warrants performance of its products to the specifications applicable at the time of sale, and all sales are made in accordance with Semtech's standard terms and conditions of sale.

SEMTECH PRODUCTS ARE NOT DESIGNED, INTENDED, AUTHORIZED OR WARRANTED TO BE SUITABLE FOR USE IN LIFE-SUPPORT APPLICATIONS, DEVICES OR SYSTEMS, OR IN NUCLEAR APPLICATIONS IN WHICH THE FAILURE COULD BE REASONABLY EXPECTED TO RESULT IN PERSONAL INJURY, LOSS OF LIFE OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE. INCLUSION OF SEMTECH PRODUCTS IN SUCH APPLICATIONS IS UNDERSTOOD TO BE UNDERTAKEN SOLELY AT THE CUSTOMER'S OWN RISK. Should a customer purchase or use Semtech products for any such unauthorized application, the consumer shall indemnify and hold Semtech and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages and attorney fees which could arise.

The Semtech name and logo are registered trademarks of the Semtech Corporation. All other trademarks and trade names mentioned may be marks and names of Semtech or their respective companies. Semtech reserves the right to make changes to, or discontinue any products described in this document without further notice. Semtech makes no warranty, representation guarantee, express or implied, regarding the suitability of its products for any particular purpose. All rights reserved.

©Semtech 2018

Contact Information

Semtech Corporation
200 Flynn Road, Camarillo, CA 93012
Phone: (805) 498-2111, Fax: (805) 498-3804
www.semtech.com



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.