To our customers,

Old Company Name in Catalogs and Other Documents

On April 1st, 2010, NEC Electronics Corporation merged with Renesas Technology Corporation, and Renesas Electronics Corporation took over all the business of both companies. Therefore, although the old company name remains in this document, it is a valid Renesas Electronics document. We appreciate your understanding.

Renesas Electronics website: http://www.renesas.com

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (http://www.renesas.com)

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RENESAS

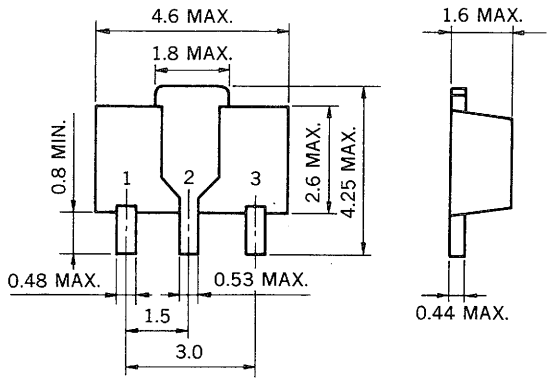
ZENER DIODES

RD4.7P ~ RD39P

1 W POWER MINI MOLD ZENER DIODE

NEC Type RD[ ]P Series are Power Mini Mold Package zener diodes possessing an allowable power dissipation of 1 watt.

OUTLINE DRAWING (Unit: mm)



1. NC
2. Cathode
3. Anode

FEATURES

- Very small size to assure good space factor in hybrid IC applications.
- V_Z; Applied E24 standard.

MAXIMUM RATINGS

Power Dissipation (P) . . . . . 1.0 W

Junction Temperature (T_j) . . . . . 150 °C

Storage Temperature (T_{stg}) . . . . . −55 to +150 °C

NEC Corporation

Electrical Characteristics ($T_a = 25\ ^\circ C$)

Type Name	Suffix	Zener Voltage $V_Z(V)$*			Dynamic Impedance $Z_Z(\Omega)$**		Reverse Current I_R (μA)	
		MIN.	MAX.	I_Z(mA)	MAX.	I_Z(mA)	MAX.	V_R(V)
RD4.7P	B	4.4	4.9	5	80	5	20	1.0
RD5.1P	B	4.8	5.4	5	60	5	20	1.0
RD5.6P	B	5.3	6.0	5	40	5	20	1.5
RD6.2P	B	5.8	6.6	5	10	5	20	3.0
RD6.8P	B	6.4	7.2	5	15	5	20	3.5
RD7.5P	B	7.0	7.9	5	15	5	20	4.0
RD8.2P	B	7.7	8.7	5	15	5	20	5.0
RD9.1P	B	8.5	9.6	5	15	5	20	6.0
RD10P	B	9.4	10.6	5	20	5	10	7.0
RD11P	B	10.4	11.6	5	20	5	10	8.0
RD12P	B	11.4	12.6	5	25	5	10	9.0
RD13P	B	12.4	14.1	5	30	5	10	10
RD15P	B	13.8	15.6	5	30	5	10	11
RD16P	B	15.3	17.1	5	40	5	10	12
RD18P	B	16.8	19.1	5	45	5	10	13
RD20P	B	18.8	21.2	5	55	5	10	15
RD22P	B	20.8	23.3	5	55	5	10	17
RD24P	B	22.8	25.6	5	70	5	10	19
RD27P	B	25.1	28.9	2	80	2	10	21
RD30P	B	28.0	32.0	2	80	2	10	23
RD33P	B	31.0	35.0	2	80	2	10	25
RD36P	B	34.0	38.0	2	90	2	10	27
RD39P	B	37.0	41.0	2	130	2	10	30

* Tested with pulse (40 ms).
** Z_Z is measured at I_Z by given a very small A.C. current signal.

Fig. 1 P-T_a Rating

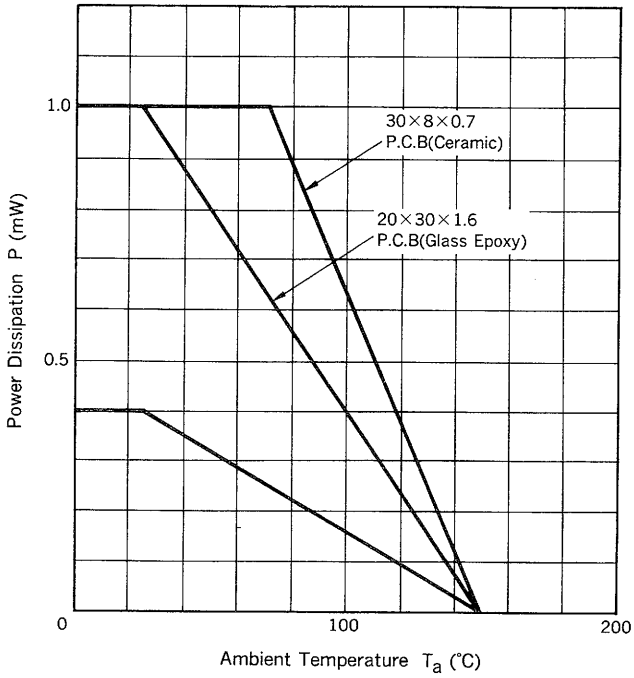
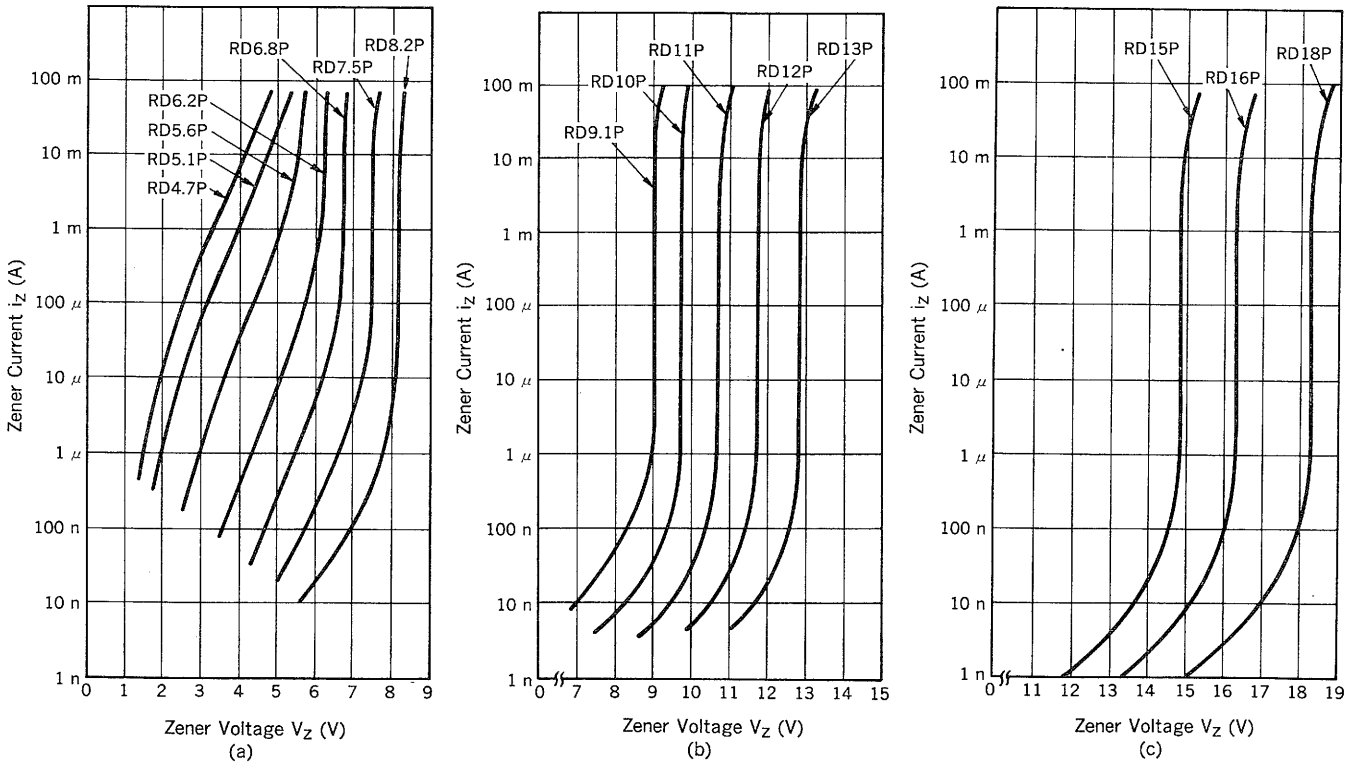
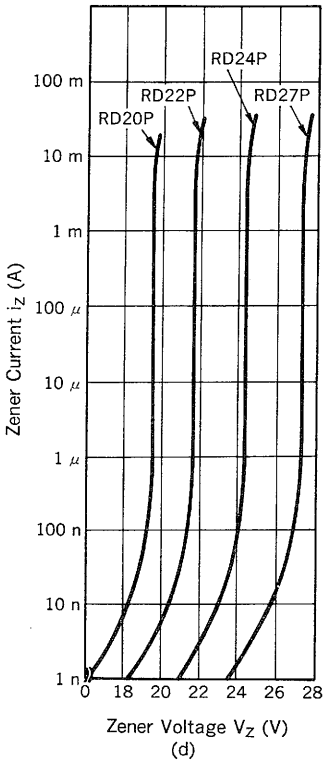


Fig. 2 i_z-v_z Characteristics





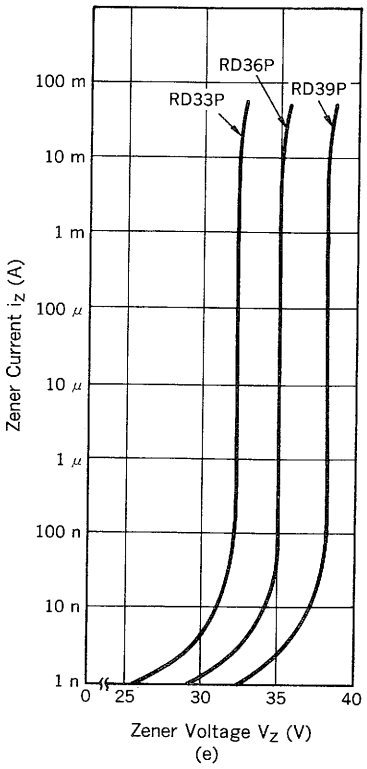


Fig. 3 γ_Z-V_Z Characteristics

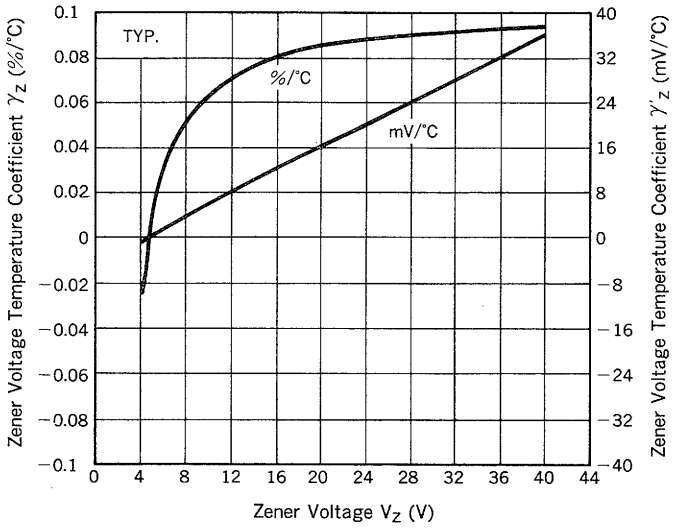
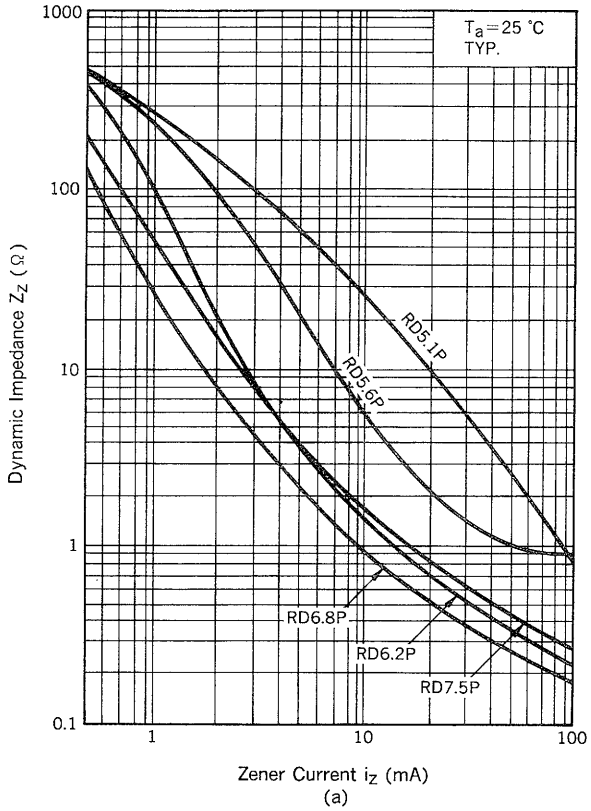
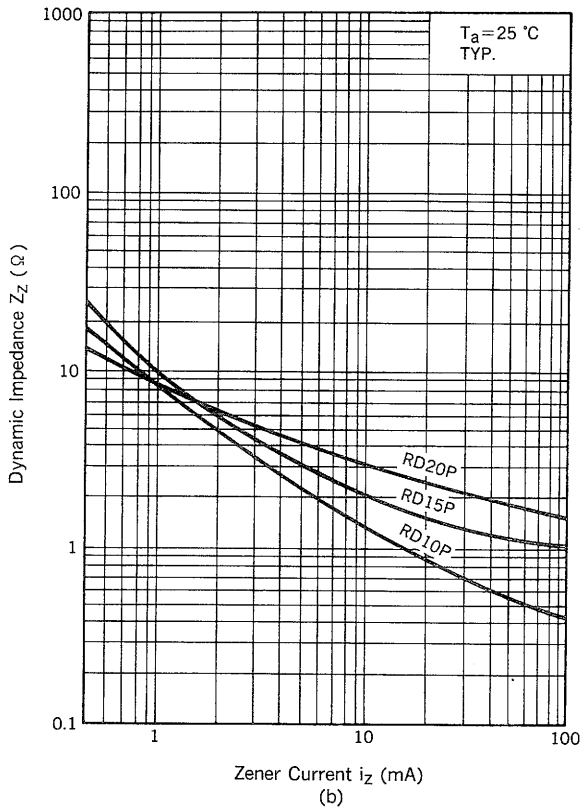


Fig. 4 Z_z-I_z Characteristics





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SN–1020
NOV.–10–83M
Printed in Japan

Search

Diode

Please note that the search results include information for products that are not under mass production.

Features & Performance

Features

Mico and best for a hybrid IC.
Zener voltage is used for E-24standard,and 2.0 to 120 V is prepared at
+-5%.
Surge endurable amount and allowable loss are large.
One type of the RD [] P series.

Performance

Show all

Product Status	Partially mass production
Applications	For constant voltage
Recommended Soldering Conditions	Click here

Order Information

Order Code	Production Status	Mass Production	Phase out / Discontinuation	Substitute	Package / Software Form / Standard Rating
RD18P	Discontinued	-	2009-10	-	SC-62
RD18P-AY	Mass production	-	-	-	SC-62
RD18P-AZ	Mass production	-	-	-	SC-62
RD18P-T1	Discontinued	-	2009-10	-	SC-62 (Taping)
RD18P-T1-AY	Mass production	-	-	-	SC-62 (Taping)
RD18P-T1-AZ	Mass production	-	-	-	SC-62 (Taping)
RD18P-T2	Discontinued	-	2009-10	-	SC-62 (Taping)
RD18P-T2-AY	Mass production	-	-	-	SC-62 (Taping)
RD18P-T2-AZ	Mass production	-	-	-	SC-62 (Taping)