To our customers,

Old Company Name in Catalogs and Other Documents

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

April 1st, 2010
Renesas Electronics Corporation

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

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PRELIMINARY SPECIFICATION

RENESAS

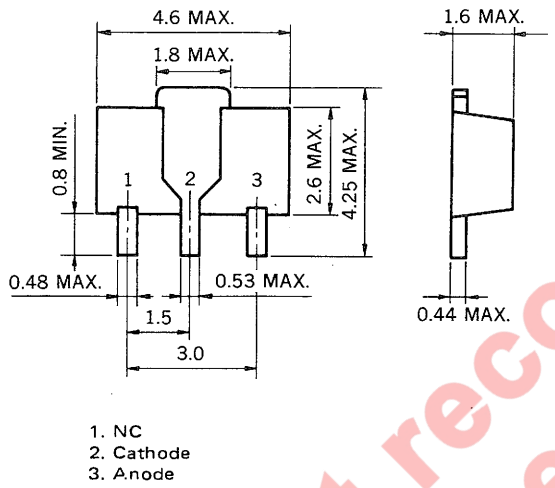
ZENER DIODES

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.

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MAXIMUM RATINGS

Power Dissipation (P)	1.0 W
Junction Temperature (T_j)	150 °C
Storage Temperature (T_{stg})	−55 to +150 °C

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Electrical Characteristics (T_a = 25 °C)

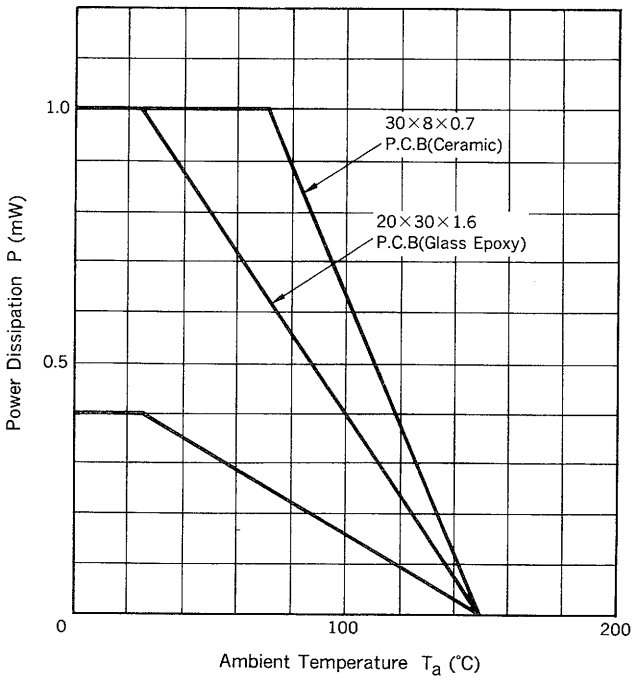
Type Name	Suffix	Zener Voltage V_Z(V)*			Dynamic Impedance Z_Z(Ω)**		Reverse Current I_R (μA)	
		MIN.	MAX.	I_Z(mA)	MAX.	I_Z(mA)	MAX.	V_R(V)
RD4.7P	B	4.4	4.9	5	80	5	20	1.0
RD5.1P	B	4.8	5.4	5	60	5	20	1.0
RD5.6P	B	5.3	6.0	5	40	5	20	1.5
RD6.2P	B	5.8	6.6	5	10	5	20	3.0
RD6.8P	B	6.4	7.2	5	15	5	20	3.5
RD7.5P	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.

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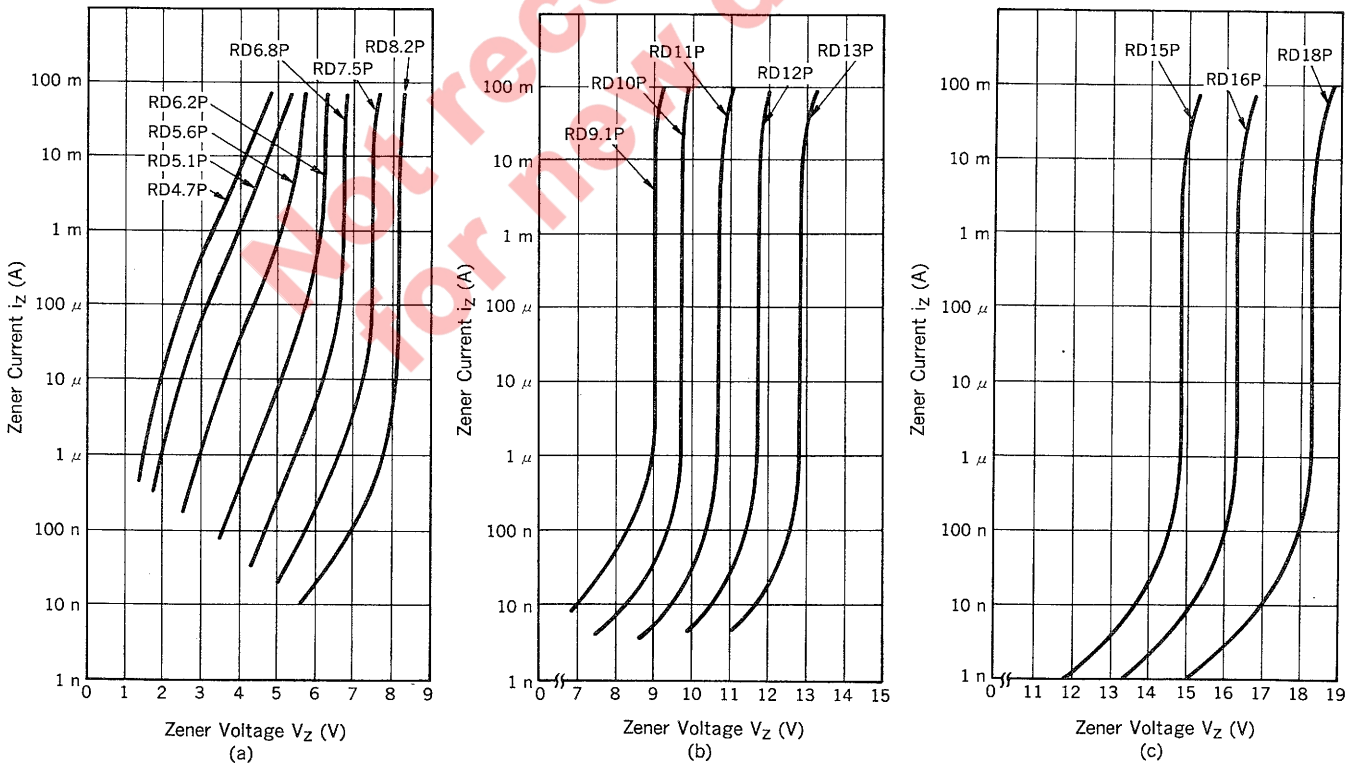
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Fig. 1 P-T_a Rating

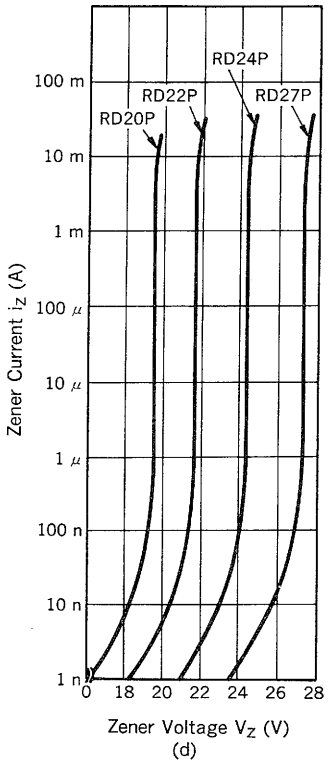


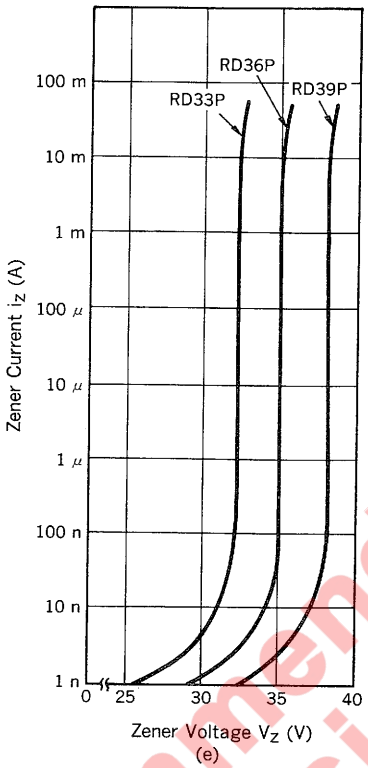
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Fig. 2 i_z-v_z Characteristics



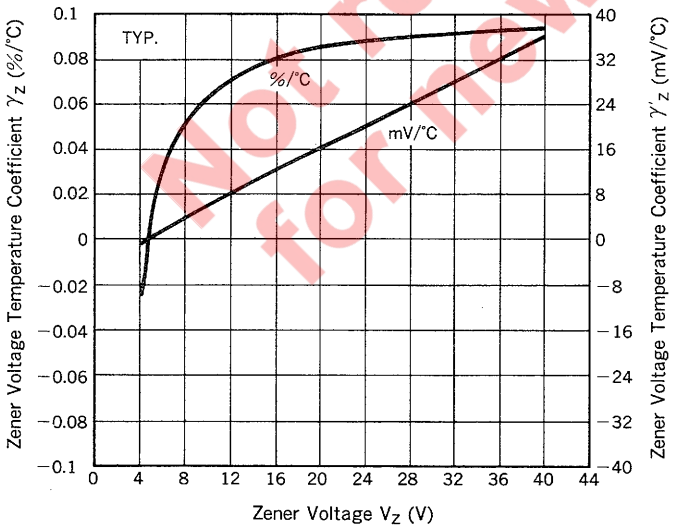
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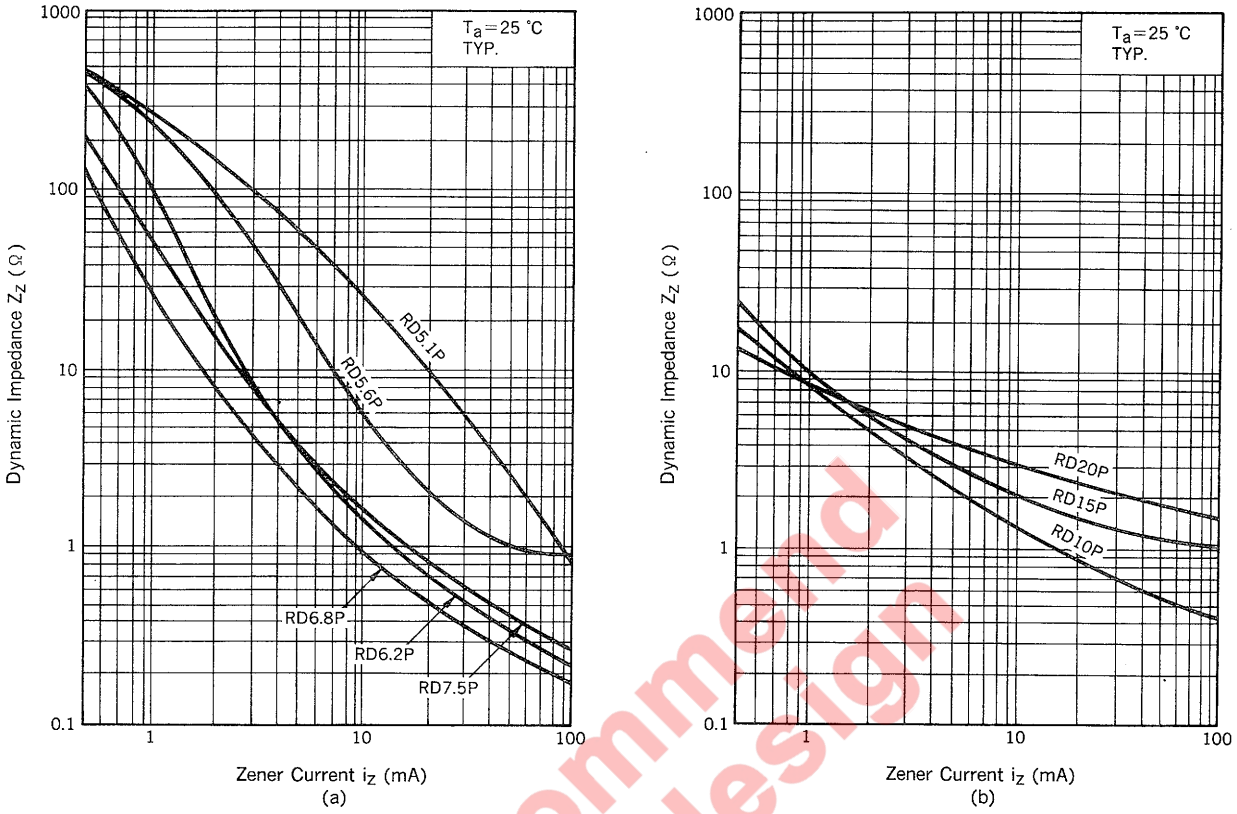
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Fig. 3 γ_z-V_z Characteristics



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Fig. 4 Z_z-I_z Characteristics



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