

To our customers,

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## Old Company Name in Catalogs and Other Documents

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April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

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# DATA SHEET



# ZENER DIODE RD6.2Z

## ZENER DIODE 200 mW ESD PROTECTION (5 V Signal Line) MINI MOLD

### DESCRIPTION

Type RD6.2Z is planar type zener diode possessing an allowable power dissipation of 200 mW.

The purpose is ESD PROTECTION of 5 V Signal Line.

### FEATURES

- Low Terminal Capacitance (8 pF TYP.) for ESD protection
- Surge absorber on either side

### APPLICATIONS

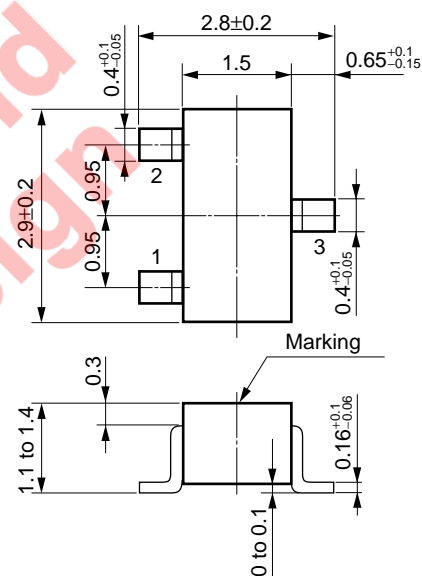
- ESD protect circuit of 5 V Signal Line.
- Constant Voltage, Constant Current, etc.

### MAXIMUM RATINGS (T<sub>A</sub> = 25°C)

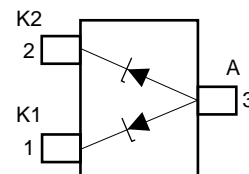
Power Dissipation	P	200 mW (Total)
Surge Reverse Power	P <sub>RSM</sub>	2 W (t = 10 μs, 1 pulse) Fig.5
Junction Temperature	T <sub>j</sub>	150°C
Storage Temperature	T <sub>stg</sub>	-55°C to +150°C

### PACKAGE DIMENSIONS

(Unit: mm)



1. Cathode : K1
2. Cathode : K2 SC-59 (EIAJ)
3. Anode : A



### ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25 ± 2°C)

Type Number	Zener Voltage V <sub>Z</sub> (V) <sup>Note 1</sup>			Dynamic Impedance Z <sub>Z</sub> (Ω) <sup>Note 2</sup>		Reverse Current I <sub>R</sub> (μA)		Terminal Capacitance C <sub>t</sub> (pF), f = 1 MHz	
	MIN.	MAX.	I <sub>Z</sub> (mA)	MAX.	I <sub>Z</sub> (mA)	MAX.	V <sub>R</sub> (V)	TYP.	V <sub>R</sub> (V)
RD6.2Z	5.9	6.5	5	60	5	3	5.5	8	0

**Note 1.** Tested with pulse (40 ms)

**2.** Z<sub>Z</sub> is measured at I<sub>Z</sub> given a very small A.C. signal

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Not all devices/types available in every country. Please check with local NEC representative for availability and additional information.

TYPICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ )

Fig. 1 P- $T_A$  RATING

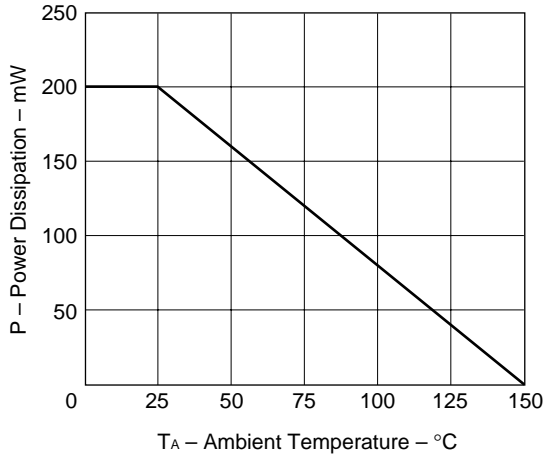


Fig. 2  $I_z$ - $V_z$  CHARACTERISTICS

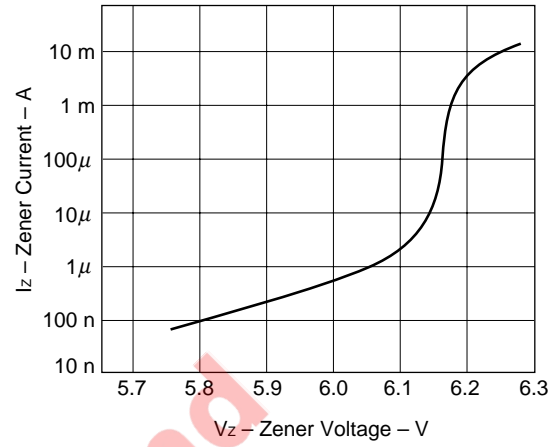
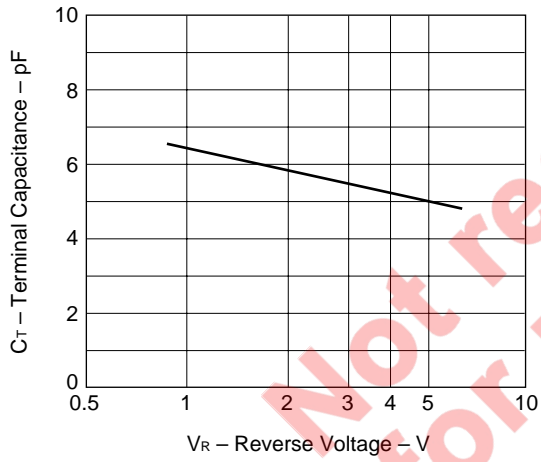
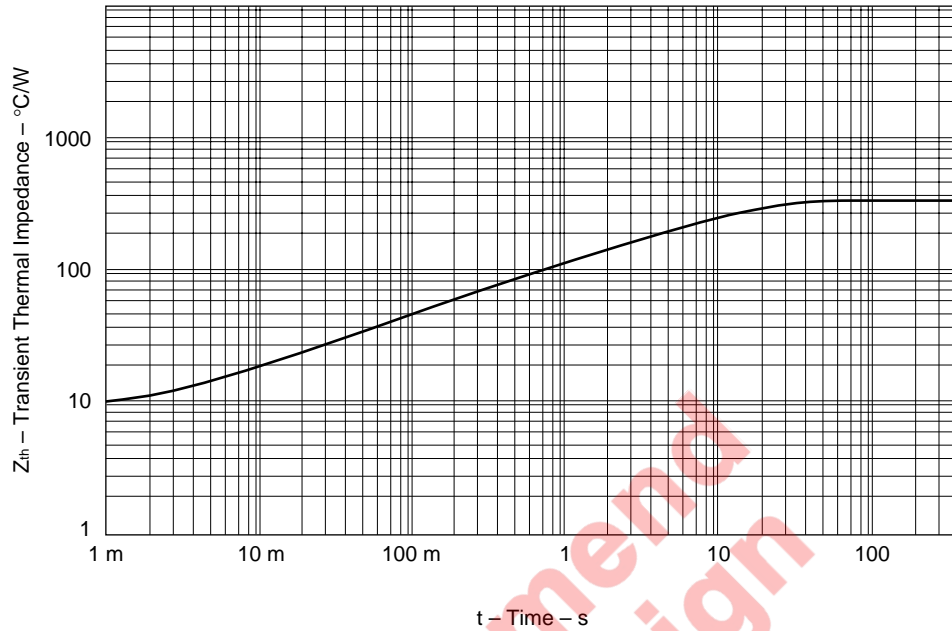


Fig. 3  $C_T$ - $V_R$  CHARACTERISTICS  
( $f = 1 \text{ MHz}$ )

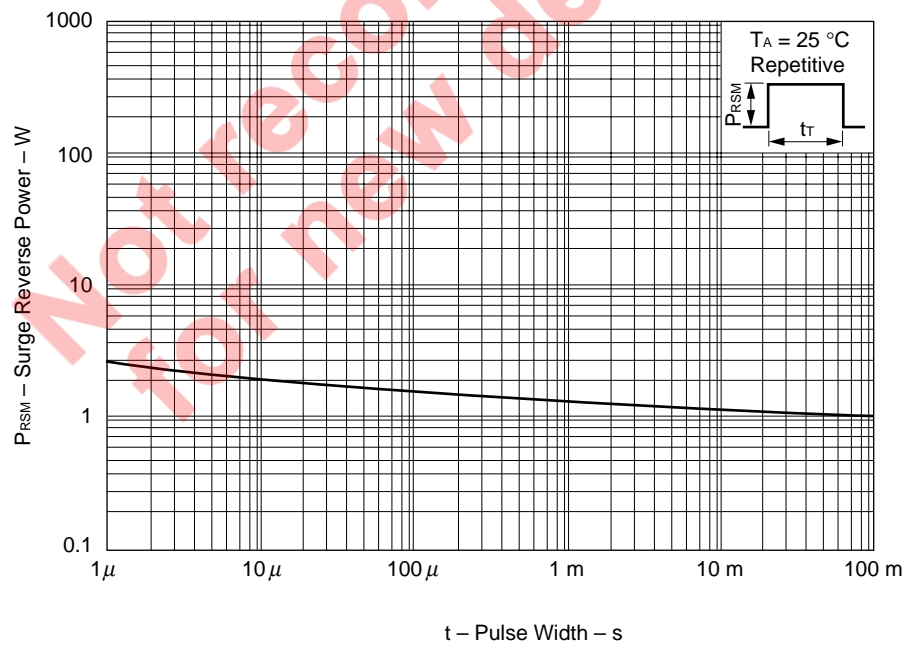


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**Fig. 4 TRANSIENT THERMAL IMPEDANCE CHARACTERISTICS**  
 (7.5 × 10 × 0.675 mm ceramics)



**Fig. 5 SURGE REVERSE POWER RATINGS**



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