

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

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

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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

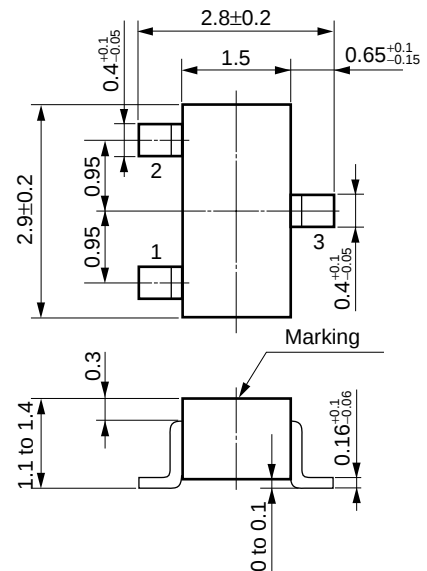
- ESD protect circuit of 5 V Signal Line.
- Constant Voltage, Constant Current, etc.

MAXIMUM RATINGS (T_A = 25°C)

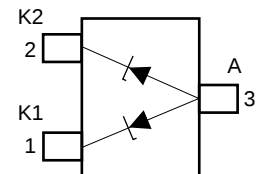
Power Dissipation	P	200 mW (Total)
Surge Reverse Power	P _{RSM}	2 W (t = 10 μs, 1 pulse) Fig.5
Junction Temperature	T _j	150°C
Storage Temperature	T _{stg}	-55°C to +150°C

PACKAGE DIMENSIONS

(Unit: mm)



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

**ELECTRICAL CHARACTERISTICS (T_A = 25 ± 2°C)**

Type Number	Zener Voltage V _Z (V) ^{Note 1}			Dynamic Impedance Z _Z (Ω) ^{Note 2}		Reverse Current I _R (μA)		Terminal Capacitance C _t (pF), f = 1 MHz	
	MIN.	MAX.	I _Z (mA)	MAX.	I _Z (mA)	MAX.	V _R (V)	TYP.	V _R (V)
RD6.2Z	5.9	6.5	5	60	5	3	5.5	8	0

Note 1. Tested with pulse (40 ms)

2. Z_Z is measured at I_Z 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

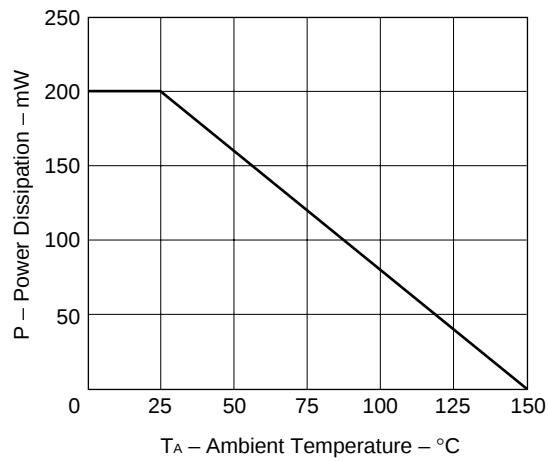


Fig. 2 I_Z - V_Z CHARACTERISTICS

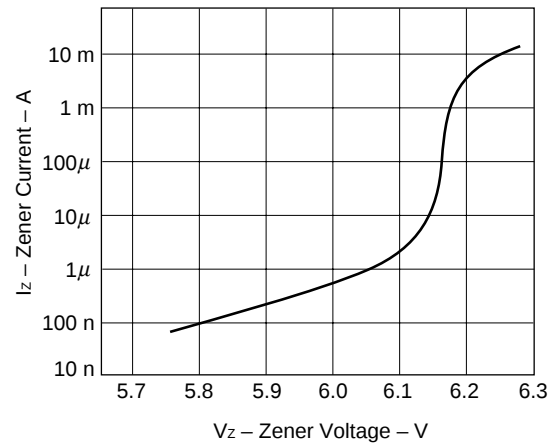


Fig. 3 C_T - V_R CHARACTERISTICS
($f = 1$ MHz)

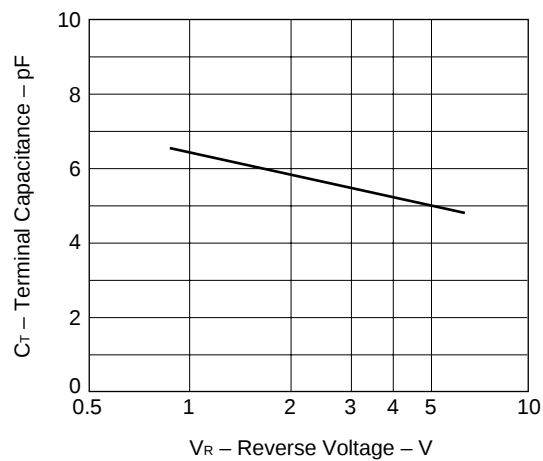


Fig. 4 TRANSIENT THERMAL IMPEDANCE CHARACTERISTICS
(7.5 × 10 × 0.675 mm ceramics)

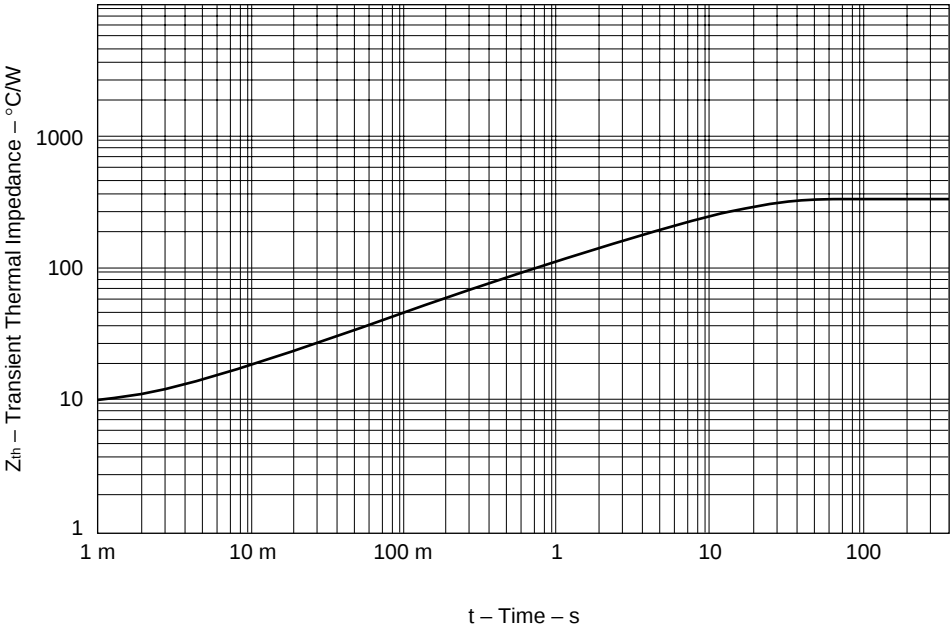
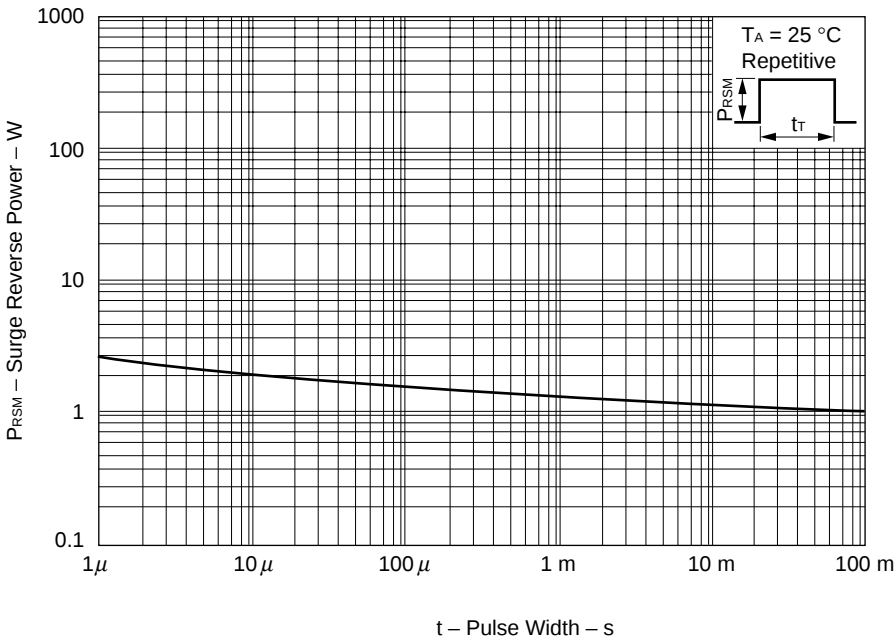


Fig. 5 SURGE REVERSE POWER RATINGS



[MEMO]

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 - Special: Transportation equipment (automobiles, trains, ships, etc.), traffic control systems, anti-disaster systems, anti-crime systems, safety equipment and medical equipment (not specifically designed for life support)
 - Specific: Aircraft, aerospace equipment, submersible repeaters, nuclear reactor control systems, life support systems or medical equipment for life support, etc.
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