# **ESD** Protection diode

# **RSB6.8S**

### Application

Noise suppression on signal line

#### Features

- 1) Small surface mounting type. (EMD2)
- 2) High reliability.

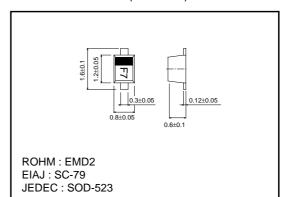
#### Construction

Silicon epitaxial planar

#### ● Circuit



#### ●External dimensions (Units : mm)



# ● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol Limits		Unit
Peak pulse power (tp=10×1000μs)	Ppk	10	w
Power dissipation	Р	150	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	<b>−55~+150</b>	°C
Operation temperature	Topr	<b>−</b> 55~+150	°C

#### ●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Zener voltage	Vz	5.780	_	7.820	V	Iz=1mA
Reverse current	IR	-	_	0.5	μА	V <sub>R</sub> =3.5V
Junction capacitance	Ct	_	30	_	pF	V <sub>R</sub> =0V, F=1MHz

<sup>\*</sup>Zener voltage (Vz) shall be measured at 40ms after loading current.

#### ●Others

Item	IEC-61000-4-2	
Equipment composition	Charge discharge capacitance Discharge resistance	: 150pF : 330Ω
Criterion	Repeat by 10 times No erroneous operation Contact In air	: ±8kV : ±15kV

## ●Electrical characteristic curves (Ta=25°C)

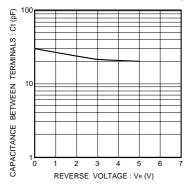


Fig.1 Capacitance between terminals characteristics

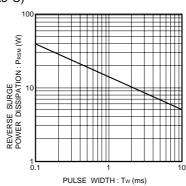


Fig.2 Surge power dissipation

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