# **ESD** Protection diode

# **RSA 6.1J4**

#### Application

ESD protection

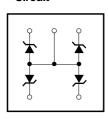
#### Features

- 1) Ultra small mold type. (EMD5)
- 2) High reliability.

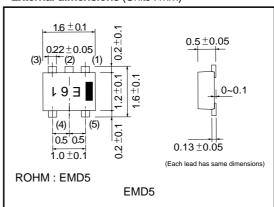
#### Construction

Silicon epitaxial planar

#### **●Circuit**



# ●External dimensions (Units : mm)



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

Parameter	Symbol	Limits	Unit
Peak pulse power-1 (tp=10×1000μs)	Ppk	10	W
Peak pulse power-2 (tp=8×20μs)	Ppk	80	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

# ● Electrical characteristics (Ta=25°C) \* Rating of per diode.

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Zener voltage	Vz	6.10	_	7.20	V	Iz=1mA
Reverse current	lR	_	_	1	μΑ	V <sub>R</sub> =3.0V
Forward voltage	VF	_	_	1.0	V	I==100mA
Junction capacitance	Ct	_	35	_	pF	V <sub>R</sub> =0V, f=1MHz

<sup>\*</sup> Zener voltage (Vz) shall be measured at 40ms after loading current. \* Please pay attention to static electricity when handling.

# ●Others

Parameter	IEC-1000-4-2	
Equipment composition	Charge discharge capacitance Discharge resistance	: 150pF : 330Ω
Criterion	Repeat by 10 times No erroneous operation Contact In air	: ±9kV : ±16kV

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

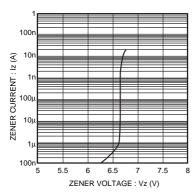


Fig.1 Zener voltage characteristics

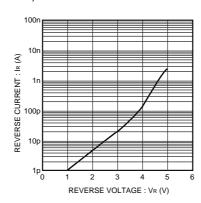


Fig.2 Reverse characteristics

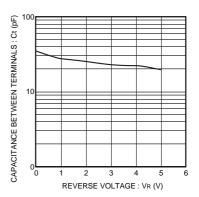


Fig.3 Capacitance between terminals characteristics

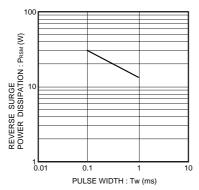


Fig.4 Surge power dissipation

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