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## PIN diode (Silicon Epitaxial Planer) RN152G

#### Applications

High frequency switching

#### Features

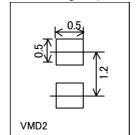
- 1) Ultra small mold type. (VMD2)
- 2) High frequency resistance which is small and low capacity.

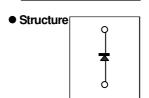
#### Construction

Silicon epitaxial planar

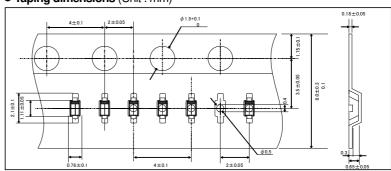
# External dimensions (Unit : mm) 0.6 ± 0.05 0.13 ± 0.03 0.13 ± 0.03 0.5 ± 0.05 ROHM : VMD2 dot (year week factory)

#### • Land size figure (Unit : mm)





#### • Taping dimensions (Unit : mm)



● Absolute maximum ratings (Ta=25°C)

- Absolute maximum rutings (14-20-0)						
Parameter	Symbol	Symbol Limits				
Reverse voltage	$V_{R}$	30	V			
Forward current	l <sub>F</sub>	100	mA			
Junction temperature	Tj	150	°C			
Storage temperature	Tstg	-55 to +150	°C			
Operation temperature	Topor	-55 to +150	°C			

#### • Electrical characteristic (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Forward voltage	$V_{F}$	-	-	1	V	I <sub>F</sub> =10mA
Reverse current	I <sub>R</sub>	-	-	0.1	μΑ	V <sub>R</sub> =30V
Capacitance between terminals	Ct	0.15	-	0.45	pF	V <sub>R</sub> =1V , f=1MHz
Forward frequency resistance	Rf	-	-	4.8	Ω	I <sub>F</sub> =1mA,f=100MHz
		-	-	1.8	Ω	I <sub>F</sub> =10mA,f=100MHz

#### Electrical characteristic curves FORWARD CURRENT:IF(mA) REVERSE CURRENT:IR(nA) CAPACITANCE BETWEEN TERMINALS:Ct(pF) 100 10 0.1 0.01 0.1 0.001 0.01 100 200 300 400 500 600 700 800 900 100 110 120 REVERSE VOLTAGE: VR(V) VR-IR CHARACTERISTICS REVERSE VOLTAGE:VR(V) VR-Ct CHARACTERISTICS FORWARD VOLTAGE: VF(mV) VF-IF CHARACTERISTICS 100 Ta=25°C VR=0V Ta=25°C IF=10mA FORWARD VOLTAGE:VF(mV) CAPACITANCE BETWEEN TERMINALS:Ct(pF) FORWARD OPERATING RESISTANCE:㎡(요) n=30pcs 830 AVE:832.7mV 0.1 0.1 810 0.1 10 100 1000 FORWARD CURRENT:IF(mA) FREQUENCY(MHz) VF DISPERSION MAP rf-IF CHARACTERISTICS Ct-f CHARACTERISTICS Ta=25°C f=100MHz 0.9 0.9 2.4 Ta=25°C ∃f=1MHz CAPACITANCE BETWEEN TERMINALS:Ct(pF) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 VR=30V 2.3 0.8 REVERSE CURRENT:IR(nA) FORWARD OPERATING n=10pcs RESISTANCE:rf( Ω) n=10pcs 0.7 2.2 0.6 2.1 0.5 0.4 1.9 0.3 0.2 1.7 0.1 O FORWARD CURRENT:IF(mA) IR DISPERSION MAP Ct DISPERSION MAP rf DISPERSION MAP 0.9 Ta=25°C f=100MHz 0.8 DISCHARGE TEST ESD(KV) IF=10mA FORWARD OPERATING RESISTANCE:rf(요) 0.7 n=10pcs ELECTROSTATIC 0.6 0.5 0.4 0.3 0.2 AVE:0.601 Ω 0.1 C=200pl 0



ESD DISPERSION MAP

FORWARD CURRENT:IF(mA)

rf DISPERSION MAP

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