PIN diode (Silicon Epitaxial Planer) RN152G

Applications

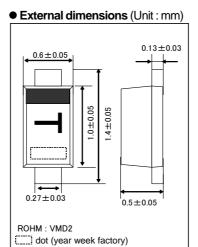
High frequency switching

Features

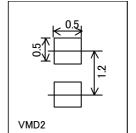
- 1) Ultra small mold type. (VMD2)
- 2) High frequency resistance which is small and low capacity.

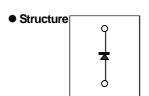
Construction

Silicon epitaxial planar

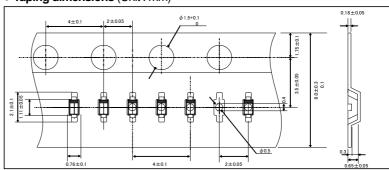


• Land size figure (Unit : mm)





• Taping dimensions (Unit : mm)



● Absolute maximum ratings (Ta=25°C)

| Absolute maximum ratings (1a=25 0) | | | | | | | |
|------------------------------------|---------------|-------------|------|--|--|--|--|
| Parameter | Symbol Limits | | Unit | | | | |
| Reverse voltage | V_R | 30 | V | | | | |
| Forward current | I_F | 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 _F =10mA |
| Reverse current | I _R | - | - | 0.1 | μΑ | V _R =30V |
| Capacitance between terminals | Ct | 0.15 | - | 0.45 | pF | V _R =1V , f=1MHz |
| Forward frequency resistance | Rf | - | - | 4.8 | Ω | I _F =1mA,f=100MHz |
| | | - | - | 1.8 | Ω | I _F =10mA,f=100MHz |

Electrical characteristic curves 1000 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 AVE:2.199 Ω 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 FORWARD CURRENT:IF(mA) ESD DISPERSION MAP rf DISPERSION MAP

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