PIN diode

RN242CS

Application

High frequency switching

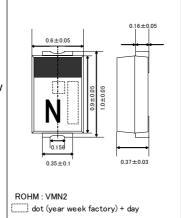
Features

- 1) Ultra small mold type. (VMN2)
- 2) Low high frequency resistance and low capacitance

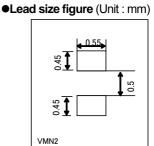
●Construction

Silicon epitaxial planer

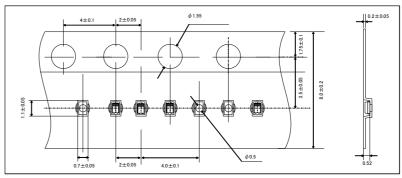
●External dimensions (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



● Absolute maximum ratings (Ta=25°C)

3-()								
Parameter	Symbol Limits		Unit					
Reverse voltage (DC)	V_R	30	V					
Forward current	I _F	100	mA					
Junction temperature	Tj	150	°C					
Storage temperature	Tstg	-55 to +150	°C					

●Electrical characteristics (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	μA	V _R =30V
Capacitance between terminals	Ct	-	1	0.35	pF	V _R =1V , f=1MHz
High frequency resistance	Rf	-	-	3	Ω	I _F =3mA,f=100MHz
		-	1	1.5	Ω	I _F =10mA,f=100MHz

●Electrical characteristic curves (Ta=25°C) 100 Ta=150°C FORWARD CURRENT:IF(mA) REVERSE CURRENT:IR(nA) 10 10 _____Ta=25°C 0.1 0.01 0 2 3 4 5 6 7 REVERSE VOLTAGE:VR(V) REVERSE VOLTAGE: VR(V) VR-IR CHARACTERISTICS FORWARD VOLTAGE: VF(mV) VF-IF CHARACTERISTICS 100 Ta=25°C Ta=25°C VR=0V FORWARD VOLTAGE:VF(mV) 850 n=30pcs CAPACITANCE BETWEEN TERMINALS:Ct(pF) FORWARD OPERATING RESISTANCE:rf(요) 10 820 AVE:831.2mV 0.1 810 0.1 10 1000 0.1 1 FORWARD CURRENT:IF(mA) FREQUENCY(MHz) VF DISPERSION MAP rf-IF CHARACTERISTICS Ct-f CHARACTERISTICS Ta=25°C Ta=25°C VR=30V f=1MHz CAPACITANCE BETWEEN TERMINALS:Ct(pF) 0.0 0.0 1.0 1.8 REVERSE CURRENT:IR(nA) FORWARD OPERATING RESISTANCE:rf(있) n=10pcs 1.5 1.3 AVE:0.06169nA 1.2 0.1 AVE:0.256pF 0 FORWARD CURRENT:IF(mA) rf DISPERSION MAP IR DISPERSION MAP Ct DISPERSION MAP Ta=25°C 1.4 f=100MH; 1.3 IF=10mA AVE:2.47kV FORWARD OPERATING RESISTANCE:rf(있) 1.2 n=10pcs 1.1 0.9 0.8 0.7 0.6 AVE:0.975 Ω 0.5 FORWARD CURRENT:IF(mA) ESD DISPERSION MAP



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