

# PIN diode

## RN142S

### ●Application

High frequency switching

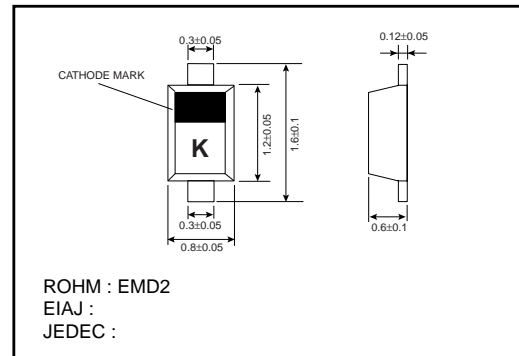
### ●Features

- 1) Ultra small mold type (EMD2)
- 2) High frequency resistance which is small and low capacity.

### ●Construction

Silicon epitaxial planer

### ●External dimensions (Units : mm)



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

Parameter	Symbol	Limits	Unit
Reverse voltage	$V_R$	60	V
Forward current	$I_F$	100	mA
Power dissipation	$P_d$	150	mW
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55~+150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	1.0	V	$I_F=10\text{mA}$
Reverse current	$I_R$	-	-	0.1	$\mu\text{A}$	$V_R=60\text{V}$
Capacitance between terminal	$C_T$	-	-	0.45	pF	$V_R=1.0\text{V}$ , $f=1.0\text{MHz}$
Forward resistance	$r_F$	-	-	3.0	$\Omega$	$I_F=3\text{mA}$ , $f=100\text{MHz}$
		-	-	2.0	$\Omega$	$I_F=10\text{mA}$ , $f=100\text{MHz}$

\* Please pay attention to static electricity when handling.

Diodes

●Electrical characteristic curves (Ta=25°C)

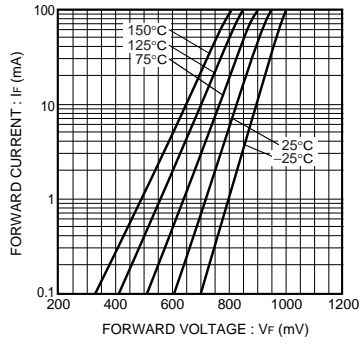


Fig.1 Forward caharacteristics

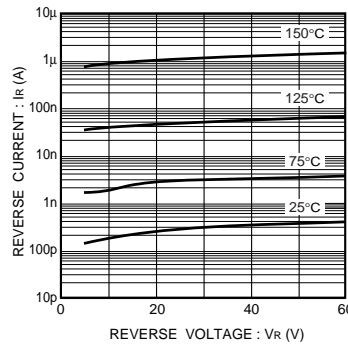


Fig.2 Reverse characteristics

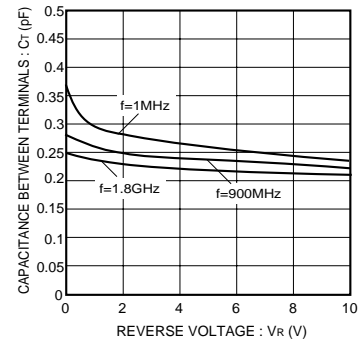


Fig.3 Capacitance vs. Reverse voltage

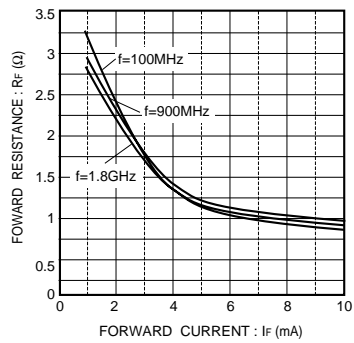


Fig.4 Forward resistance vs. Forward current