

PIN diode

RN142S

●Application

High frequency switching

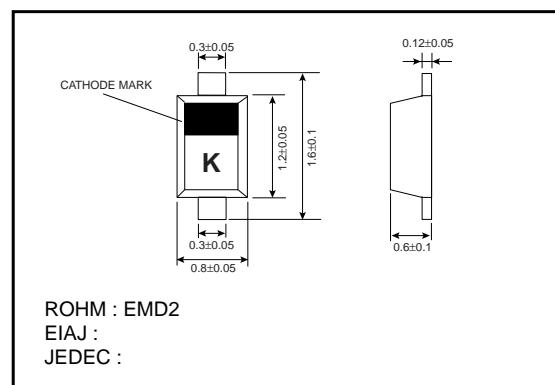
●Features

- 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 ($T_a=25^{\circ}\text{C}$)

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	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55~+150	$^{\circ}\text{C}$

●Electrical characteristics ($T_a=25^{\circ}\text{C}$)

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	μA	$V_R=60\text{V}$
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	Ω	$I_F=3\text{mA}, f=100\text{MHz}$
		—	—	2.0	Ω	$I_F=10\text{mA}, f=100\text{MHz}$

* Please pay attention to static electricity when handling.

Diodes

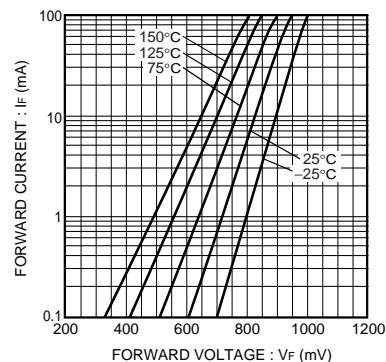
●Electrical characteristic curves ($T_a=25^\circ\text{C}$)

Fig.1 Forward characteristics

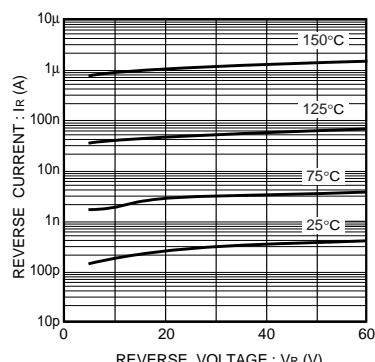
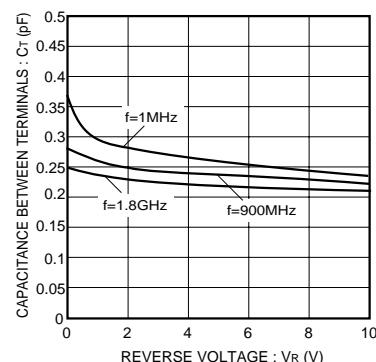
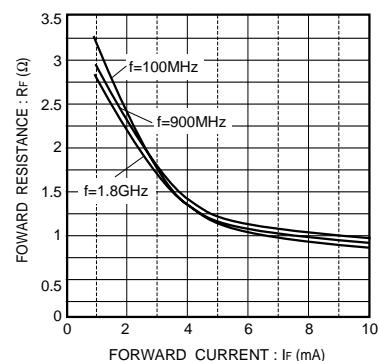


Fig.2 Reverse characteristics

Fig.3 Capacitance vs.
Reverse voltageFig.4 Forward resistance vs.
Forward current