

PIN Diode

RN731V

●Applications

VHF/UHF band variable attenuators and AGC

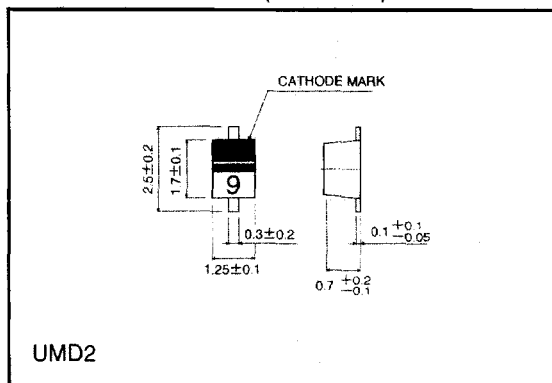
●Features

- 1) Designed for mounting on small surface areas (UMD2).
- 2) Low high-frequency forward resistance (r_F)/low capacitance (C_T)
- 3) High reliability

●Construction

Silicon diffusion junction

●External dimensions (Units: mm)



●Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
DC reverse voltage	V_R	50	V
DC forward current	I_F	50	mA
Power dissipation	P_d	100	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	$-55 \sim +125$	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	—	0.93	1.0	V	$I_F=50\text{mA}$
Reverse current	I_R	—	0.01	100	nA	$V_R=50\text{V}$
Capacitance between terminals	C_T	—	0.23	0.4	pF	$V_R=35\text{V}$, $f=1\text{MHz}$
Forward operating resistance	r_F	—	3.5	7	Ω	$I_F=10\text{mA}$, $f=100\text{MHz}$

● Electrical characteristic curves

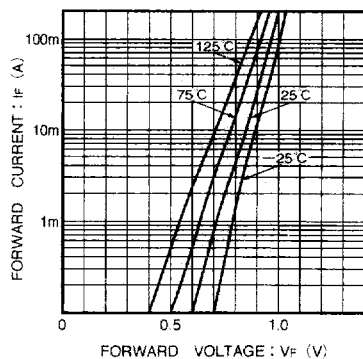


Fig. 1 Forward temperature characteristic

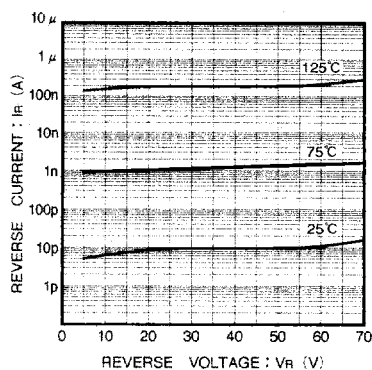


Fig. 2 Reverse temperature characteristic

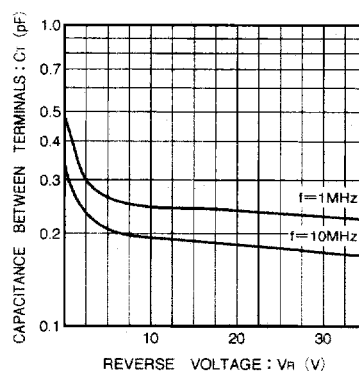


Fig. 3 Capacitance between terminals characteristic 1

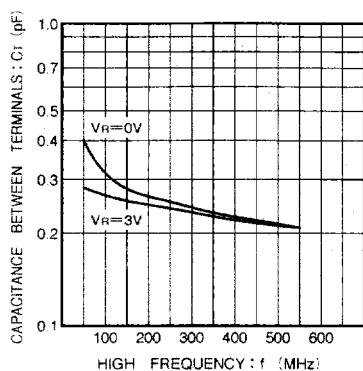


Fig. 4 Capacitance between terminals characteristic 2

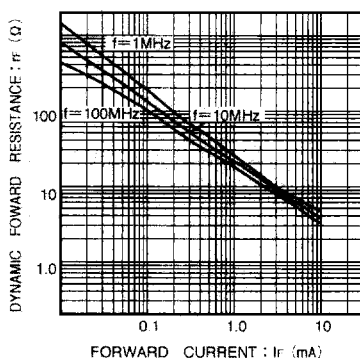


Fig. 5 High frequency characteristic

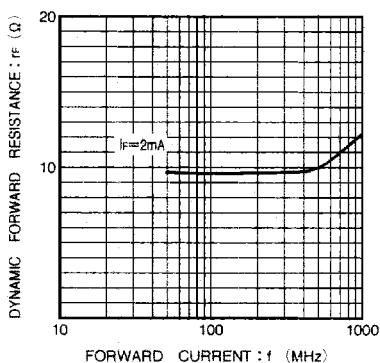


Fig. 6 Forward operating resistance characteristic