PIN diode
RN739F / RN739D

●Applications

VHF / UHF band variable attenuators and AGC

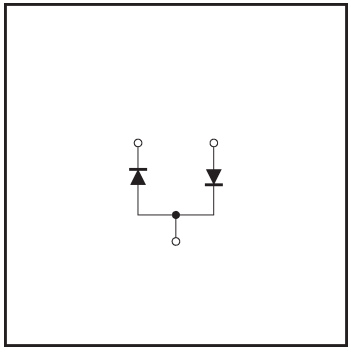
●Features

1) Multiple diodes in one small surface mount package. (UMD / SMD3)
2) Low high–frequency forward resistance / low capacitance.
3) High reliability.

●Construction

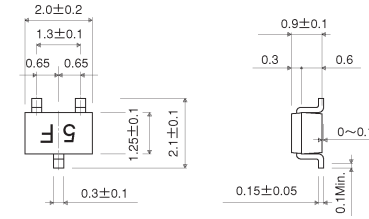
Silicon diffusion junction

●Equivalent circuit



●External dimensions (Units: mm)

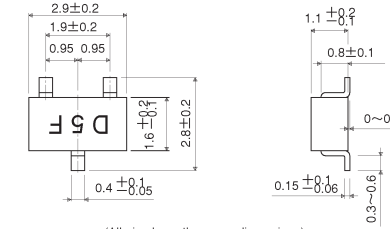
RN739F



(All pins have the same dimensions)

ROHM : UMD3
EIAJ : SC - 70
JEDEC : SOT - 323

RN739D



(All pins have the same dimensions)

ROHM : SMD3
EIAJ : SC - 59
JEDEC : SOT - 23 similar

●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
DC reverse voltage	V_R	50	V
DC forward current	I_F	50	mA
Power dissipation	Pd	100	mW
Junction temperature	Tj	125	℃
Storage temperature	Tstg	−55～+125	℃

●Electrical characteristics (Ta = 25°C)

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

●Electrical characteristic curves (Ta = 25°C unless specified otherwise)

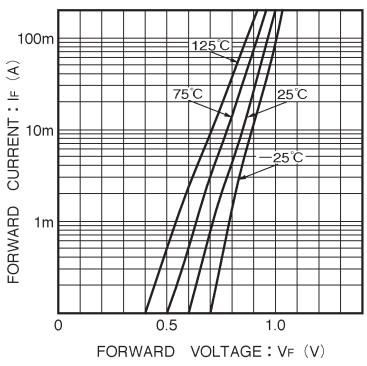


Fig. 1 Forward characteristics

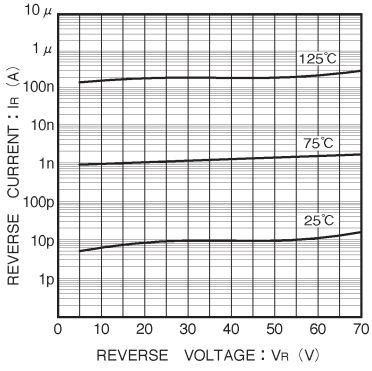


Fig. 2 Reverse characteristics

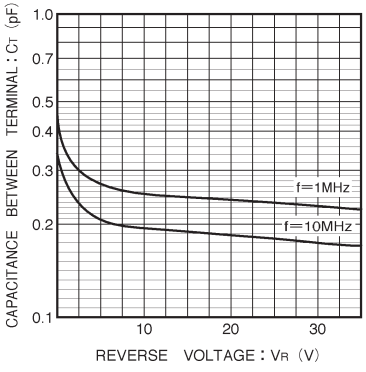


Fig. 3 Capacitance between terminals characteristics 1

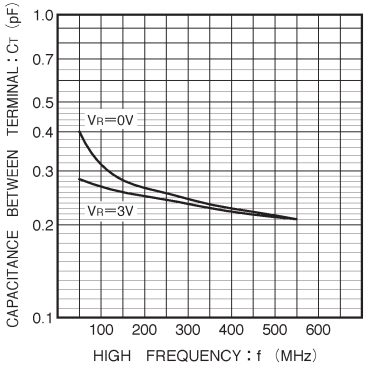


Fig. 4 Capacitance between terminals characteristics 2

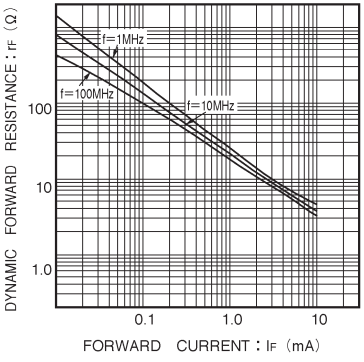


Fig. 5 High frequency characteristics

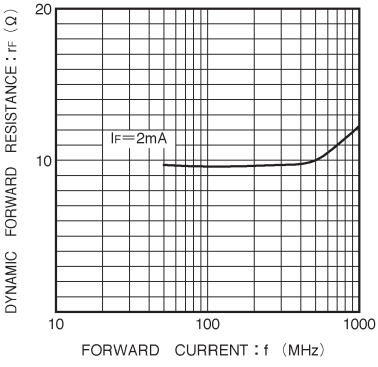


Fig. 6 Forward operating resistance characteristics

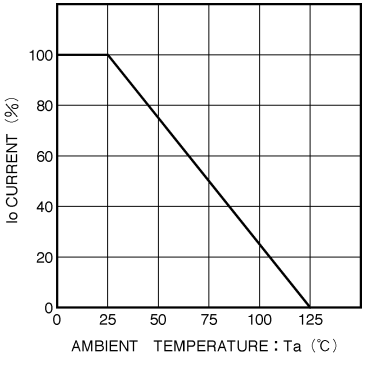


Fig. 7 Derating curve
(mounting on glass epoxy PCBs)