PIN diode

RN739F / RN739D

●Applications

VHF / UHF band variable attenuators and AGC

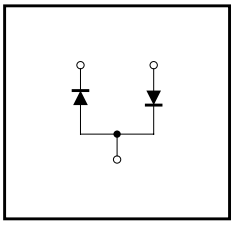
●Features

1) Multiple diodes in one small surface mount package. (UMD3, SMD3)
2) Low high-frequency forward resistance (r_F) / low capacitance (C_T).
3) High reliability.

●Construction

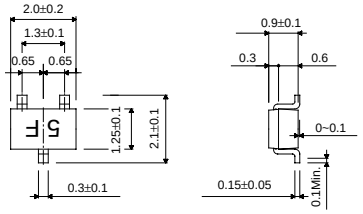
Silicon diffusion junction

●Circuit



●External dimensions (Units : mm)

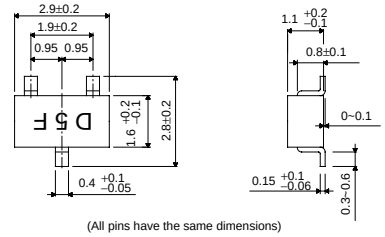
RN739F



(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-346

●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	°C
Storage temperature	Tstg	−55~+125	°C

●Electrical characteristics (Ta = 25°C)

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

●**Electrical characteristic curves** (Ta = 25°C)

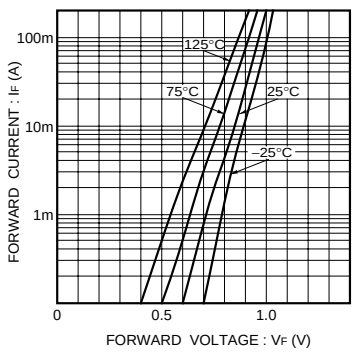


Fig.1 Forward characteristics

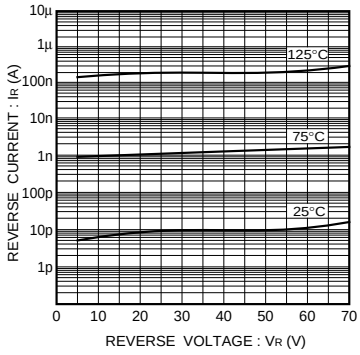


Fig.2 Reverse characteristics

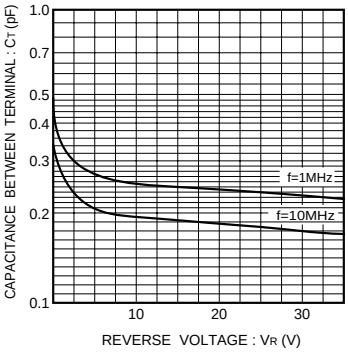


Fig.3 Capacitance between terminals characteristics 1

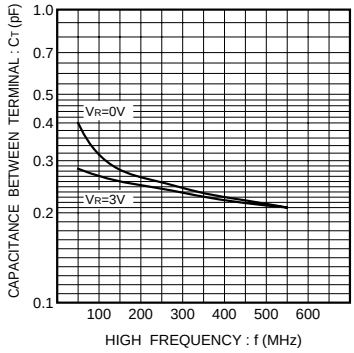


Fig.4 Capacitance between terminals characteristics 2

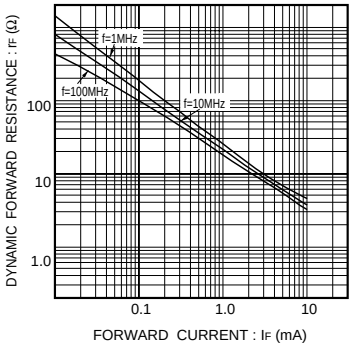


Fig.5 High frequency characteristics

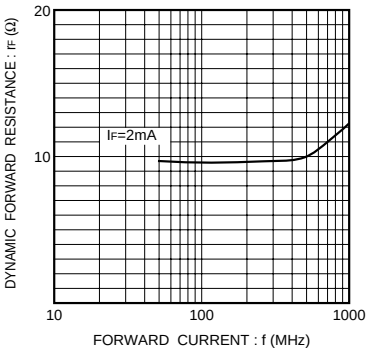


Fig.6 Forward operating resistance characteristics

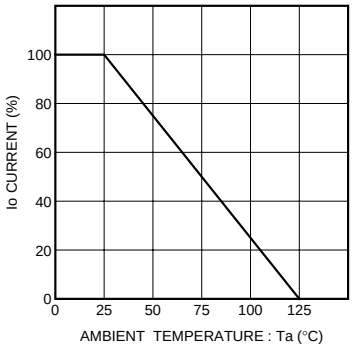


Fig.7 Derating curve
(mounting on glass epoxy PCBs)