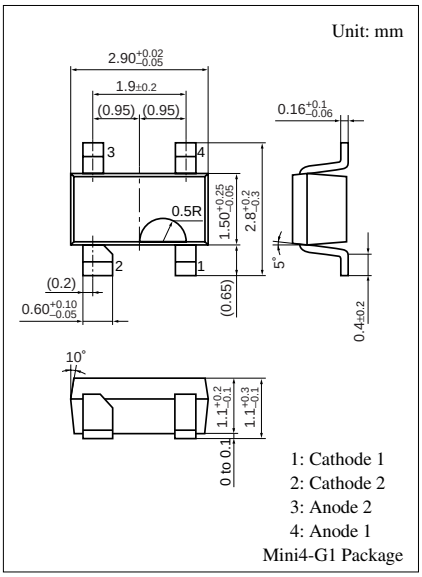
MA4X862 (MA862)

Silicon epitaxial planar type

For band switching

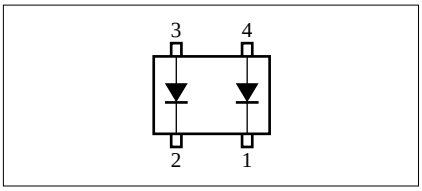
■ Features

- Two electrically independent elements incorporated
- Small diode capacity C_D
- Low forward dynamic resistance r_f
- Optimum for a band switching of tuner



Marking Symbol: M1I

Internal Connection



■ Absolute Maximum Ratings $T_a = 25°C$

Parameter		Symbol	Rating	Unit
Reverse voltage (DC)		V_R	35	V
Forward current (DC)	Single	I_F	100	mA
	Double		75	mA/Unit
Operating ambient temperature		T_{opr}	−25 to +85	°C
Storage temperature		T_{stg}	−55 to +100	°C

■ Electrical Characteristics $T_a = 25°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	V_R = 33 V			100	nA
Forward voltage (DC)	V_F	I_F = 100 mA			1.0	V
Diode capacitance	C_D	V_R = 6 V, f = 1 MHz			1.2	pF
Forward dynamic resistance	r_{f1} *1	I_F = 2 mA, f = 100 MHz			0.65	Ω
	r_{f2} *2				0.98	

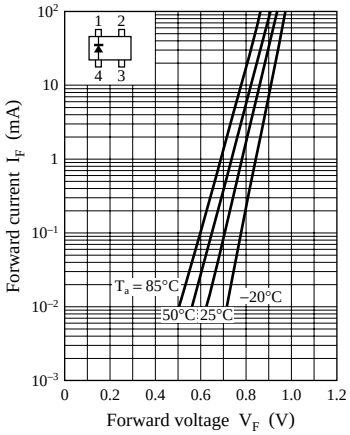
Note) 1. Rated input/output frequency: 100 MHz

2. ∗1: Measuring instrument; Nihon Koshuha MODEL TDC-121A

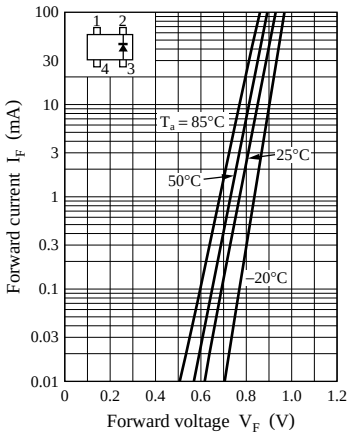
3. ∗2: Measuring instrument; YHP MODEL 4191A RF IMPEDANCE ANALYZER

Note) The part number in the parenthesis shows conventional part number.

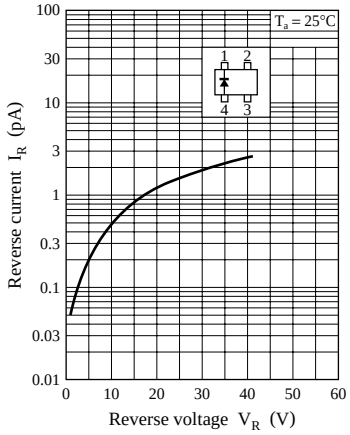
I_F — V_F (1-4 pins)



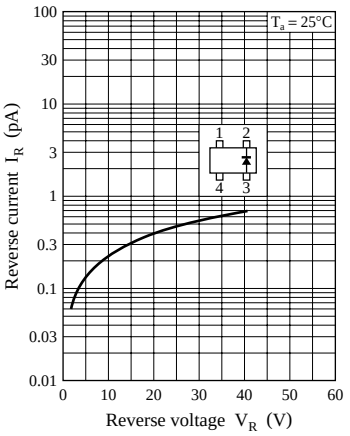
I_F — V_F (2-3 pins)



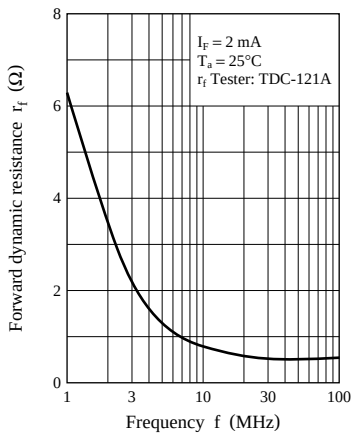
I_R — V_R (1-4 pins)



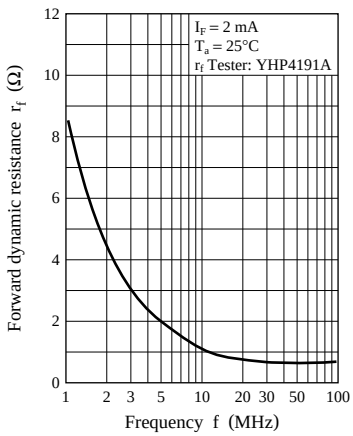
I_R — V_R (2-3 pins)



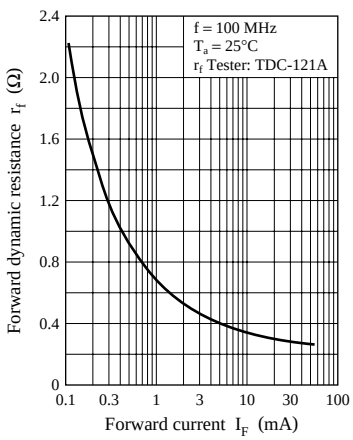
r_f — f



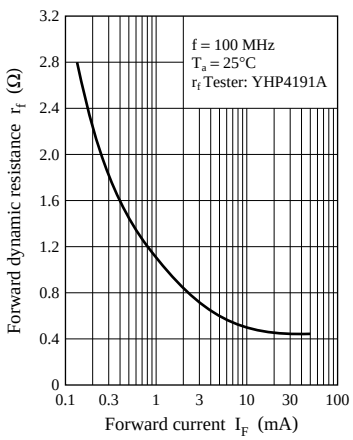
r_f — f



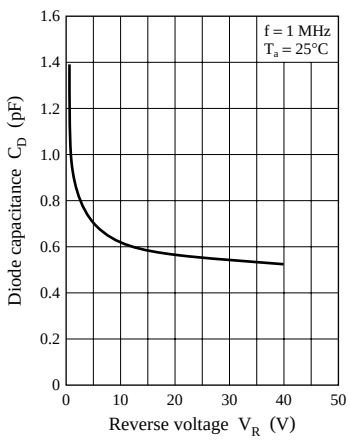
r_f — I_F



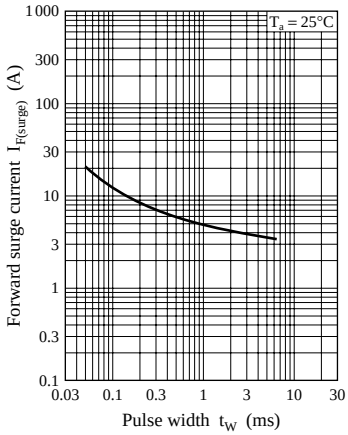
r_f — I_F



C_D — V_R



$I_{F\,(surge)}$ — t_W


T_a = 25°C
1000
300
100
30
10
3
1
0.3
0.1
0.03
0.1
0.3
1
3
10
30
Forward surge current $I_{F(surge)}$ (A)
Pulse width t_W (ms)

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