# MA3X551 (MA551)

### Silicon epitaxial planar type

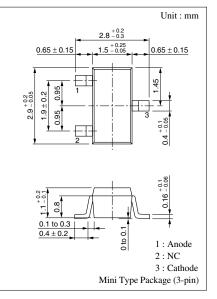
For UHF and SHF bands AGC

#### Features

- Small diode capacitance C<sub>D</sub>
- $\bullet$  Large variable range of forward dynamic resistance  $r_{\rm f}$
- Mini type package, allowing downsizing of equipment and automatic insertion through the taping package and magazine package

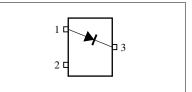
Parameter	Symbol	Rating	Unit			
Reverse voltage (DC)	V <sub>R</sub>	40	V			
Peak reverse voltage	V <sub>RM</sub>	45	V			
Forward current (DC)	$I_{\rm F}$	100	mA			
Power dissipation	$P_{D}$	150	mW			
Operating ambient temperature	T <sub>opr</sub>	-25 to +85	°C			
Storage temperature	T <sub>stg</sub>	-55 to +150	°C			

#### Absolute Maximum Ratings $T_a = 25^{\circ}C$



#### Marking Symbol: MY

#### Internal Connection

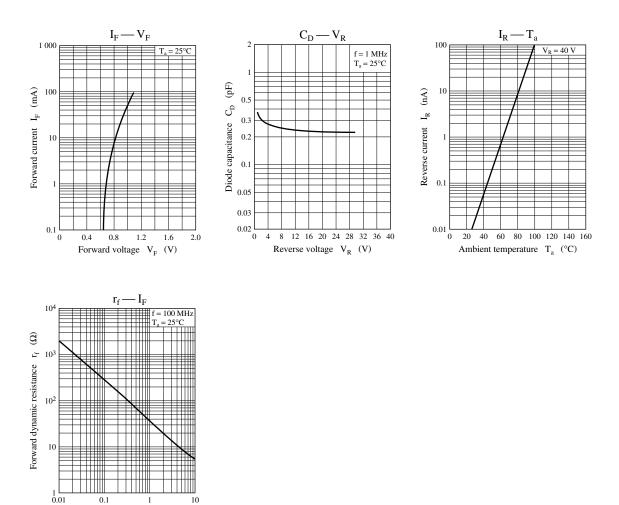


Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	I <sub>R</sub>	$V_R = 40 V$			100	nA
Forward voltage (DC)	V <sub>F</sub>	$I_F = 100 \text{ mA}$		1.05	1.2	V
Diode capacitance	CD	$V_{R} = 15 V, f = 1 MHz$		0.3	0.5	pF
Forward dynamic resistance*	r <sub>f1</sub>	$I_F = 10 \ \mu A, f = 100 \ MHz$	1	2		kΩ
	r <sub>f2</sub>	$I_F = 10 \text{ mA}, f = 100 \text{ MHz}$		6	10	Ω

#### Electrical Characteristics $T_a = 25^{\circ}C$

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

2. \*: rf measuring instrument: YHP MODEL 4191A RF IMPEDANCE ANALYZER



Forward current IF (mA)

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