# **MA2Z391** (MA391)

## N type GaAs epitaxial planar type

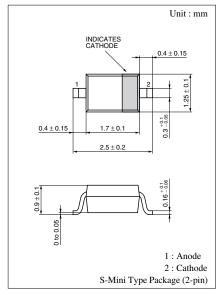
#### For VCO of a communications equipment

#### ■ Features

- Small series resistance r<sub>D</sub> and high Q value
- Large capacitance ratio during low-voltage operation

### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	$V_R$	10	V
Forward current (DC)	$I_F$	30	mA
Junction temperature	Tj	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C



Marking Symbol: 7S

### ■ Electrical Characteristics $T_a = 25$ °C

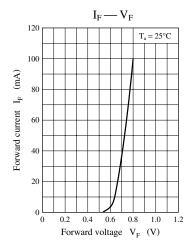
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 6 \text{ V}$			50	nA
Forward voltage (DC)	$V_{\mathrm{F}}$	$I_F = 300 \text{ mA}$			0.8	V
Reverse voltage (DC)	V <sub>R</sub>	$I_R = 1 \mu A$	10			V
Diode capacitance	C <sub>D(1V)</sub>	$V_R = 1 \text{ V, } f = 1 \text{ MHz}$		3.7	5.0	pF
	C <sub>D(4V)</sub>	$V_R = 4 \text{ V}, \text{ f} = 1 \text{ MHz}$	1.0	1.4		pF
Series resistance*	$r_{\mathrm{D}}$	$C_D = 1.6 \text{ pF, f} = 470 \text{ MHz}$		0.3	0.5	Ω

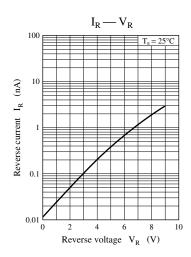
Note) 1. Rated input/output frequency: 470 MHz

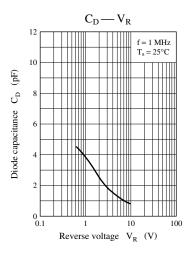
Note) The part number in the parenthesis shows conventional part number.

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<sup>2. \*:</sup>  $r_f$  measuring instrument: RF IMPEDANCE ANALYZER







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