

# MA2Z391

## N type GaAs epitaxial planar type

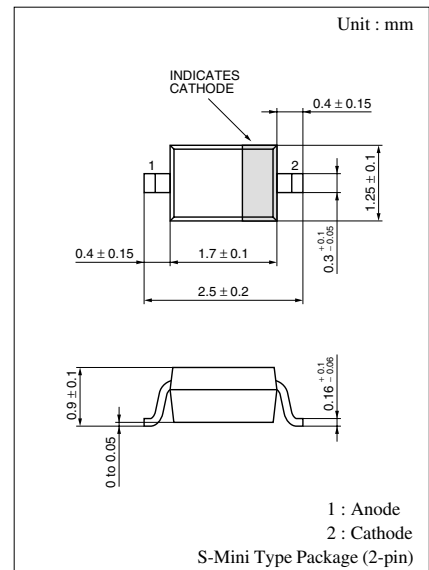
For VCO of a communications equipment

### ■ Features

- Small series resistance  $r_D$  and high Q value
- Large capacitance ratio during low-voltage operation

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

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



Marking Symbol: 7S

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 6\text{ V}$			50	nA
Forward voltage (DC)	$V_F$	$I_F = 300\text{ mA}$			0.8	V
Reverse voltage (DC)	$V_R$	$I_R = 1\ \mu\text{A}$	10			V
Diode capacitance	$C_{D(1V)}$	$V_R = 1\text{ V}, f = 1\text{ MHz}$		3.7	5.0	pF
	$C_{D(4V)}$	$V_R = 4\text{ V}, f = 1\text{ MHz}$	1.0	1.4		pF
Series resistance*	$r_D$	$C_D = 1.6\text{ pF}, f = 470\text{ MHz}$		0.3	0.5	$\Omega$

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

2. \*:  $r_f$  measuring instrument: RF IMPEDANCE ANALYZER

