# **MA2Z365** (MA365)

### Silicon epitaxial planar type

#### For CATV tuner

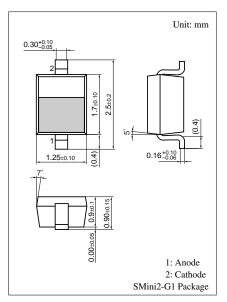
#### ■ Features

- $\bullet$  The largest capacitance ratio of 14  $(C_{D(2V)}\,/\,C_{D(25V)})$
- S-Mini type package, allowing downsizing of equipment and automatic insertion through the taping package

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	$V_R$	32	V
Peak reverse voltage *	$V_{RM}$	35	V
Forward current (DC)	$I_F$	20	mA
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

Note) \*:  $R_L = 10 \text{ k}\Omega$ 



Marking Symbol: 6F

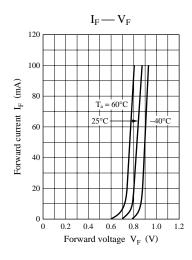
#### ■ Electrical Characteristics $T_a = 25$ °C

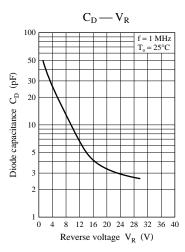
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	I <sub>R</sub>	$V_R = 30 \text{ V}$			10	nA
Diode capacitance	C <sub>D(2V)</sub>	$V_R = 2 \text{ V}, \text{ f} = 1 \text{ MHz}$	36.00		42.59	pF
	C <sub>D(25V)</sub>	$V_R = 25 \text{ V, f} = 1 \text{ MHz}$	2.54		3.08	
	C <sub>D(10V)</sub>	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$	8.00		11.31	
	C <sub>D(17V)</sub>	V <sub>R</sub> = 17 V, f = 1 MHz	3.40		4.63	
Capacitance ratio	C <sub>D(2V)</sub> /C <sub>D(25V)</sub>		13	14		_
Diode capacitance deviation	ΔC	C <sub>D(2V)(10V)(17V)(25V)</sub>			2.5	%
Series resistance *	$r_{\mathrm{D}}$	$C_D = 9 \text{ pF, } f = 470 \text{ MHz}$			0.85	Ω

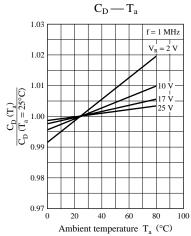
Note) 1. Rated input/output frequency: 470 MHz

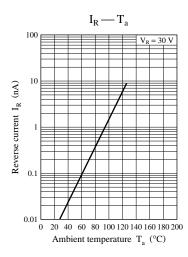
Note) The part number in the parenthesis shows conventional part number.

<sup>2. \*:</sup> Measuring instrument; YHP MODEL 4191A RF IMPEDANCE ANALYZER



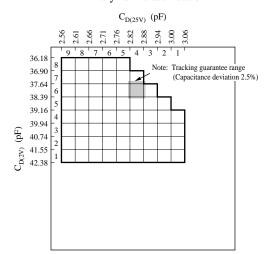




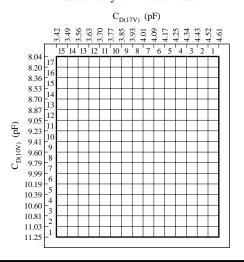


#### C<sub>D</sub> rank classification

Primary rank classification



#### Secondary rank classification



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