

MA370

Silicon epitaxial planer type

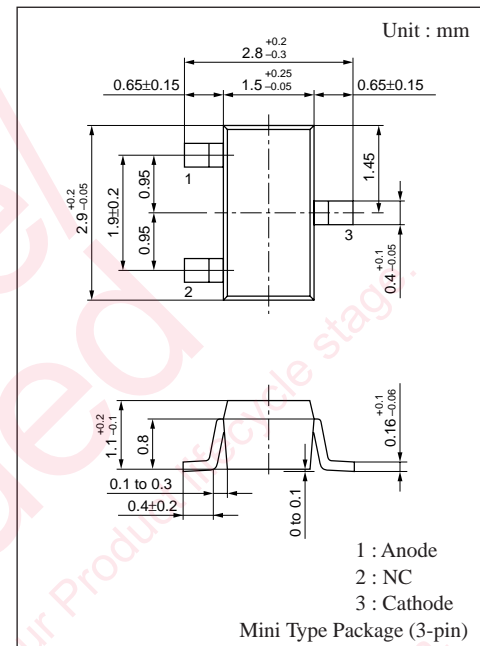
For UHF and SHF electronic tuners

■ Features

- Large capacity variation ratio
- Small series resistance r_D
- Mini package, enabling down-sizing of the equipment and automatic insertion through taping and magazine package

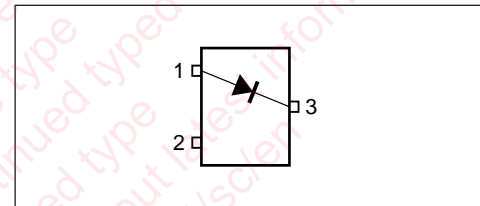
■ Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	30	V
Peak reverse voltage	V_{RM}	32	V
Forward current (DC)	I_F	20	mA
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$



Marking Symbol : MZ

■ Internal Connection



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

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_R	$V_R=30\text{V}$			50	nA
Diode capacitance	$C_{D(1V)}$	$V_R=1\text{V}, f=1\text{MHz}$	3.6	4.6	5.6	pF
	$C_{D(30V)}$	$V_R=30\text{V}, f=1\text{MHz}$	0.5	0.65	0.9	pF
Capacitance ratio	$C_{D(1V)}/C_{D(30V)}$		4			—
Series resistance	r_D^*	$C_D=4.5\text{pF}, f=470\text{MHz}$		2		Ω

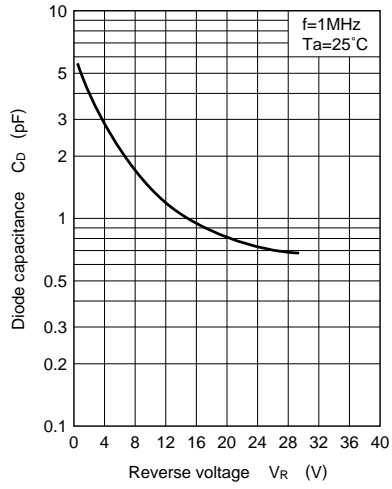
Note 1. Rated input/output frequency : 470MHz

2. * r_D measurement device : YHP MODEL 4191A RF IMPEDANCE ANALYZER

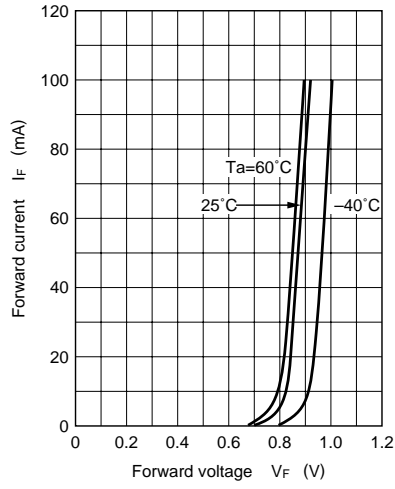
■ Marking



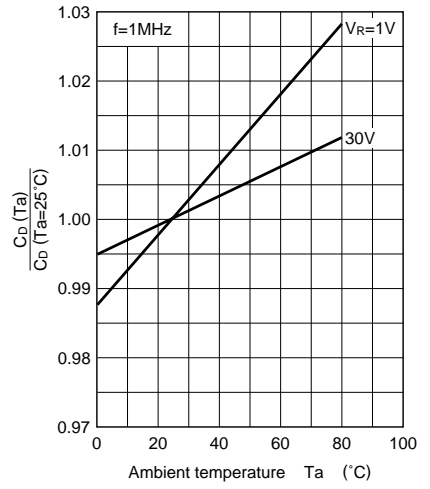
$C_D - V_R$



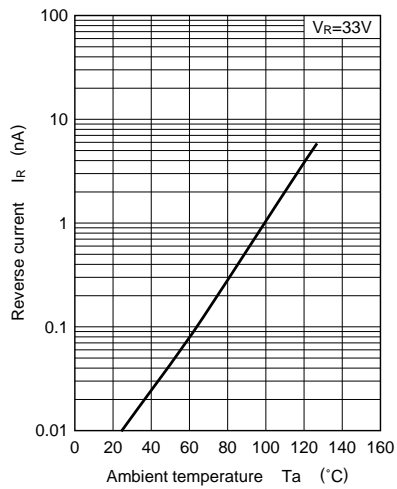
$I_F - V_F$



$C_D - T_a$



$I_R - T_a$



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