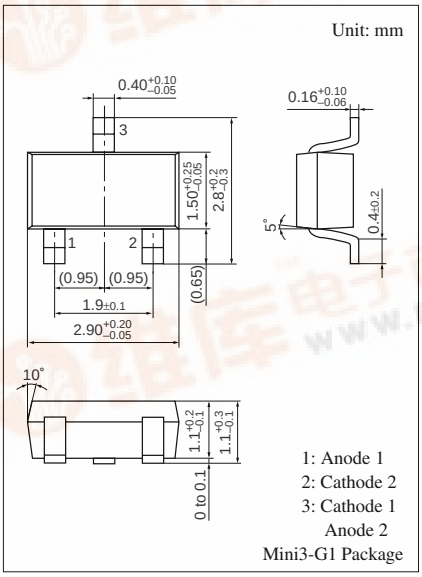
MA3X557 (MA557)

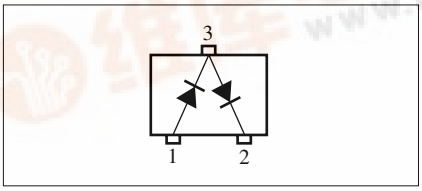
Silicon epitaxial planar type

For UHF and SHF bands AGC



Marking Symbol: M30

Internal Connection



■ Features

- Small diode capacitance C_D
- Large variable range of forward dynamic resistance r_f
- Mini type package, allowing downsizing of equipment and automatic insertion through the taping package and magazine package

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	40	V
Peak reverse voltage	V_{RM}	45	V
Forward current (DC)	I_F	100	mA
Power dissipation	P_D	150	mW
Operating ambient temperature *	T_{opr}	−25 to +85	°C
Storage temperature	T_{stg}	−55 to +150	°C

Note) *: Maximum ambient temperature during operation

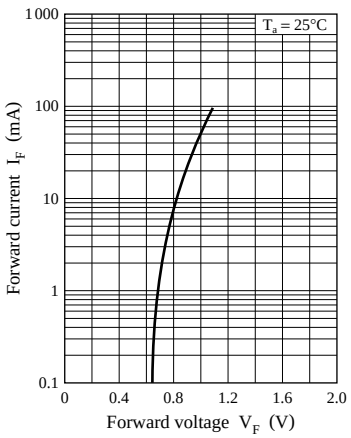
■ Electrical Characteristics $T_a = 25°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	V_R = 40 V			100	nA
Forward voltage (DC)	V_F	I_F = 100 mA		1.05	1.2	V
Diode capacitance	C_D	V_R = 15 V, f = 1 MHz		0.3	0.5	pF
Forward dynamic resistance *	r_{f1}	I_F = 10 μA, f = 100 MHz	1	2		kΩ
	r_{f2}	I_F = 10 mA, f = 100MHz		6	10	Ω

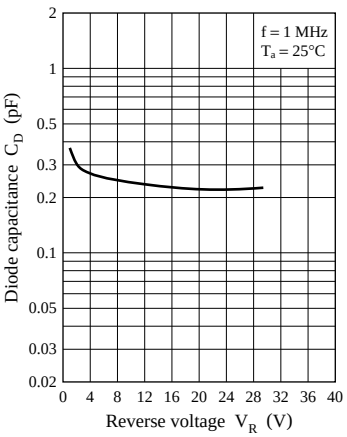
Note) 1. Rated input/output frequency: 100 MHz
2. Each characteristic is a standard for individual diode
3. *: Measuring instrument; YHP MODEL 4191A RF IMPEDANCE ANALYZER

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

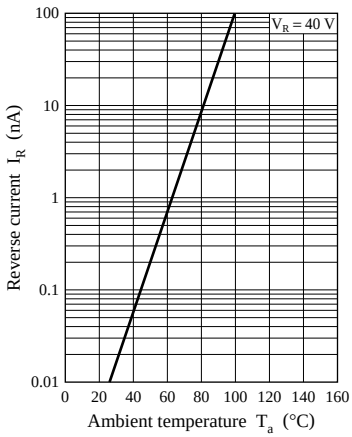
I_F — V_F



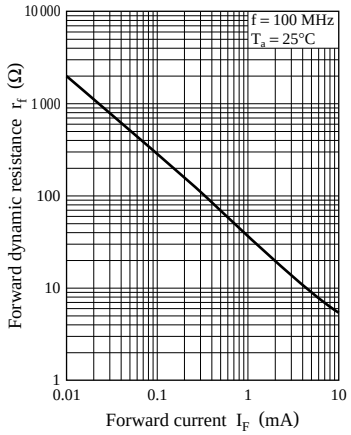
C_D — V_R



I_R — T_a



r_f — I_F



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