# **MA3X198** (MA198)

## Silicon epitaxial planar type

### For wave detection

### ■ Features

- Two elements contained in one package, allowing high-density mounting
- Soft recovery characteristic ( $t_{rr} = 100 \text{ ns}$ )

### ■ Absolute Maximum Ratings T<sub>a</sub> = 25°C

Parameter		Symbol	Rating	Unit	
Reverse voltage		$V_R$	40	V	
Repetitive peak reverse voltage		V <sub>RRM</sub>	40	V	
Forward current	Single	I <sub>F(AV)</sub>	100	mA	
(Average)	Series		75		
Repetitive peak	Single	$I_{FRM}$	225	mA	
forward current	Series		170		
Non-repetitive peak	Single	$I_{FSM}$	500	mA	
forward surge current*	Series		325	W.	
Junction temperature		Tj	150	°C	
Storage temperature		T <sub>stg</sub>	-55 to +150	°C √	

## ■ Package

- Code
- Mini3-G1
- Pin Name
  - 1: Anode 1
  - 2: Cathode 2
  - 3: Cathode 1, Anode 2

### ■ Marking Symbol: M2F

### Internal Connection



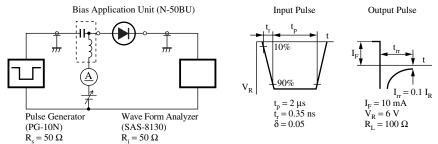
Note) \*: t = 1 s

## ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	$V_{F1}$	$I_F = 100 \mu A$	0.65		0.72	V
	$V_{F2}$	$I_F = 100 \text{ mA}$	0.7		1.2	V
Reverse current	$I_R$	$V_R = 40 \text{ V}$	) -		10	nA
Terminal capacitance	C <sub>t</sub>	$V_R = 6 \text{ V}, f = 1 \text{ MHz}$		1.0	2.0	pF
Reverse recovery time*	t <sub>rr</sub>	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$			100	ns
		$I_{rr} = 0.1 I_{R}, R_{L} = 100 \Omega$				

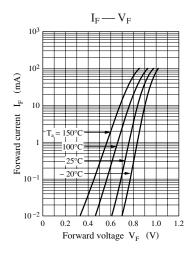
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

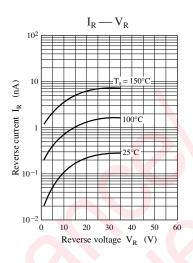
- 2. Absolute frequency of input and output is 10 MHz.
- 3. \*: t<sub>rr</sub> measurement circuit

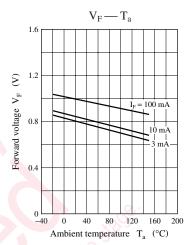


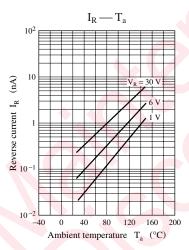
Note) The part number in the parenthesis shows conventional part number.

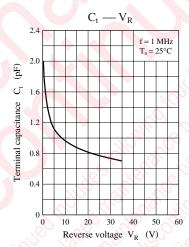
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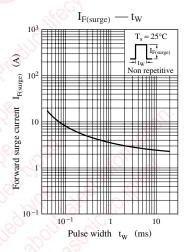




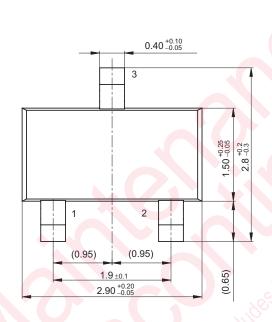


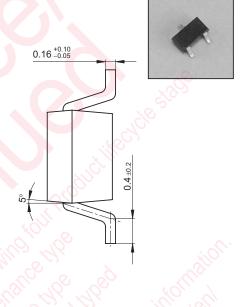


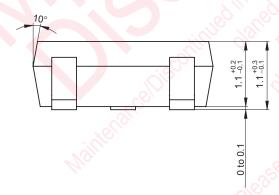




Mini3-G1 Unit: mm







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