## **MAS3795**

## Silicon epitaxial planar type

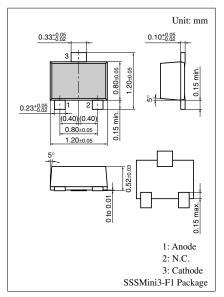
For high-speed switching circuits

#### ■ Features

- High-density mounting is possible
- Optimum for high frequency rectification because of its short reverse recovery time (t<sub>rr</sub>)
- Low forward voltage  $V_F$  optimum for low voltage rectification  $V_F = < 0.3 \text{ V}$  (at  $I_F = 1 \text{ mA}$ )
- SSS-Mini type 3-pin package

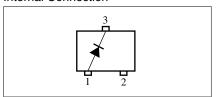
### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Reverse voltage (DC)	$V_R$	30	V	
Peak reverse voltage	$V_{RM}$	30	V	
Forward current (DC)	$I_F$	30	mA	
Peak forward current	$I_{FM}$	150	mA	
Junction temperature	T <sub>j</sub>	125	°C	
Storage temperature	$T_{stg}$	-55 to +125	°C	



Marking Symbol: M2

#### Internal Connection



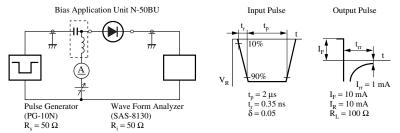
#### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

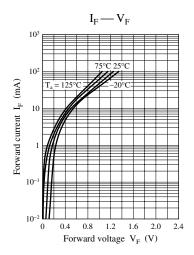
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 30 \text{ V}$			30	μΑ
Forward voltage (DC)	V <sub>F1</sub>	$I_F = 1 \text{ mA}$			0.3	V
	$V_{F2}$	$I_F = 30 \text{ mA}$			1.0	
Terminal capacitance	C <sub>t</sub>	$V_R = 1 V, f = 1 MHz$		1.5		pF
Reverse recovery time *	t <sub>rr</sub>	$I_F = I_R = 10 \text{ mA}$		1.0		ns
		$I_{rr} = 1 \text{ mA}, R_L = 100 \Omega$				
Detection efficiency	η	$V_{in} = 3 V_{(peak)}$ , $f = 30 MHz$		65		%
		$R_L = 3.9 \text{ k}\Omega, C_L = 10 \text{ pF}$				

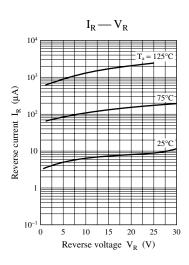
Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

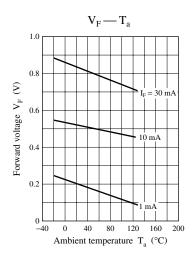
2. Rated input/output frequency: 2 GHz

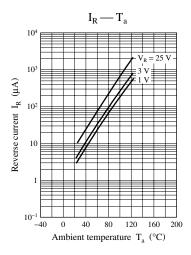
3. \*: t<sub>rr</sub> measuring instrument

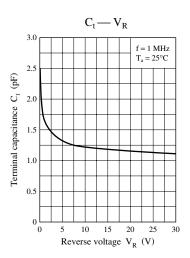












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