# MA3S781D, MA3S781E (MA781WA, MA781WK)

## Silicon epitaxial planar type

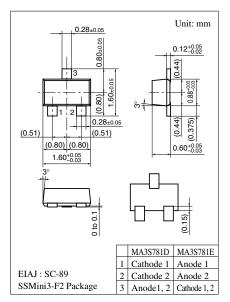
For high speed switching

#### ■ Features

- Two MA3S781 (MA781) is contained in one package
- High-density mounting is possible
- Low forward voltage V<sub>F</sub>
- SS-Mini type 3-pin package

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

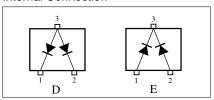
Parameter		Symbol	Rating	Unit
Reverse voltage (DC)		$V_R$	30	V
Peak reverse voltage		$V_{RM}$	30	V
Forward current (DC)	Single	$I_F$	30	mA
	Double		20	
Peak forward current	Single	$I_{FM}$	150	mA
	Double		110	
Junction temperature		T <sub>j</sub>	125	°C
Storage temperature		$T_{stg}$	-55 to +125	°C



#### Marking Symbol

• MA3S781D: M2P • MA3S781E: M2R

#### Internal Connection



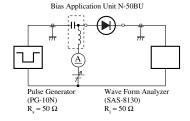
### ■ Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

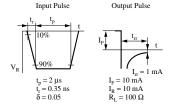
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 30 \text{ V}$			1.0	μΑ
Forward voltage (DC)	V <sub>F1</sub>	$I_F = 1 \text{ mA}$			0.4	V
	V <sub>F2</sub>	$I_F = 30 \text{ mA}$			1.0	V
Terminal capacitance	C <sub>t</sub>	$V_R = 1 \text{ V, f} = 1 \text{ MHz}$		1.5		pF
Reverse 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.

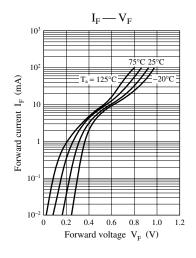
2. Rated input/output frequency: 2 GHz

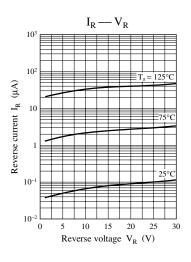
3. \*: t<sub>rr</sub> measuring instrument

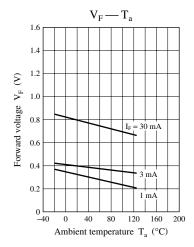


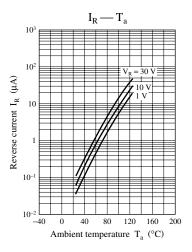


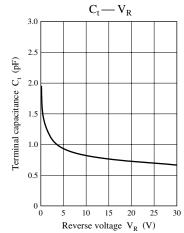
Note) The part number in the parenthesis shows conventional part number.

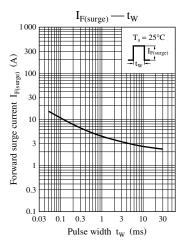












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