

# MA3XD14E

## Silicon epitaxial planar type (cathode common)

For high-speed switching circuits

### ■ Features

- Mini type 3-pin package
- Low forward rise voltage  $V_F$  ( $V_F < 0.4$  V)
- Cathode common type

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	$V_R$	20	V
Repetitive peak reverse voltage	$V_{RRM}$	20	V
Non-repetitive peak forward surge current*2	$I_{FSM}$	1	A
Forward current (DC)	Single	$I_F$	mA
	Double*1		
Peak forward current	Single	$I_{FM}$	mA
	Double*1		
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

Note) \*1: The value for operating one chip

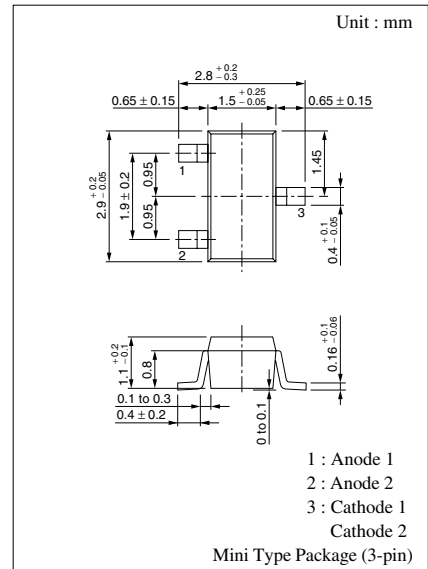
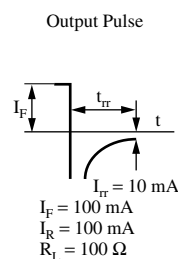
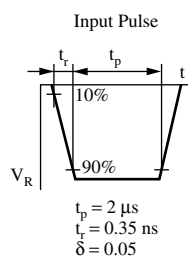
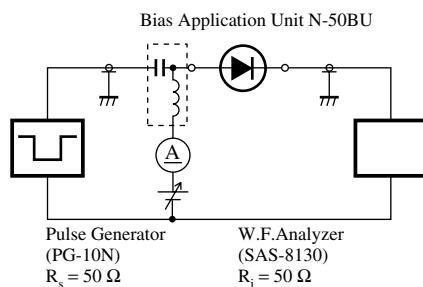
\*2: The peak-to-peak value in one cycle of 50 Hz sine-wave (non-repetitive)

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 10$ V			20	$\mu\text{A}$
Forward voltage (DC)	$V_{F1}$	$I_F = 5$ mA			0.27	V
	$V_{F2}$	$I_F = 100$ mA			0.40	V
Terminal capacitance	$C_t$	$V_R = 0$ V, $f = 1$ MHz		25		pF
Reverse recovery time*	$t_{rr}$	$I_F = I_R = 100$ mA $I_{tr} = 10$ mA, $R_L = 100$ $\Omega$		3.0		ns

Note) 1. Schottky barrier diode 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: 250 MHz
3. \*:  $t_{rr}$  measuring circuit



Marking Symbol: M5H

Internal Connection

