

# MA3X786D, MA3X786E (MA786WA, MA786WK)

## Silicon epitaxial planar type

For super high speed switching

For small current rectification

### ■ Features

- Two MA3X786 (MA786) is contained in one package
- $I_{F(AV)} = 100$  mA rectification is possible
- Optimum for high frequency rectification because of its short reverse recovery time ( $t_{rr}$ )
- Low forward voltage  $V_F$  and good rectification efficiency
- Mini type 3-pin package

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

Parameter		Symbol	Rating	Unit
Reverse voltage (DC)		$V_R$	30	V
Repetitive peak reverse-voltage		$V_{RRM}$	30	V
Peak forward current	Single	$I_{FM}$	300	mA
	Double *2		200	
Average forward current	Single	$I_{F(AV)}$	100	mA
	Double *2		70	
Non-repetitive peak forward-surge-current *1		$I_{FSM}$	1	A
Junction temperature		$T_j$	125	$^\circ\text{C}$
Storage temperature		$T_{stg}$	-55 to +125	$^\circ\text{C}$

Note) \*1: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

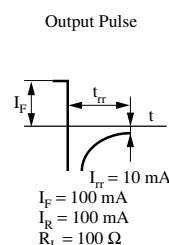
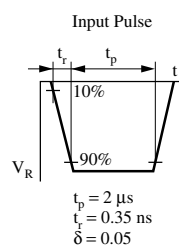
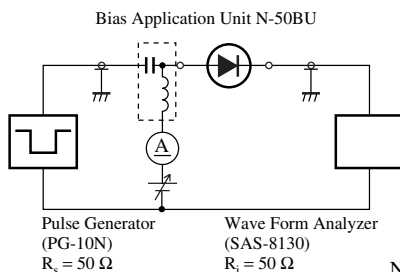
\*2: Value per chip

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

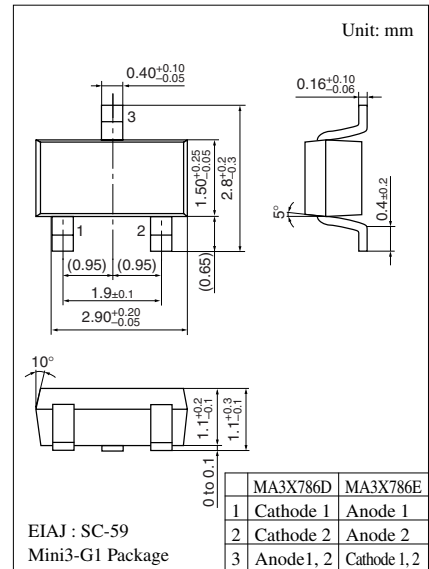
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 30$ V			15	$\mu\text{A}$
Forward voltage (DC)	$V_F$	$I_F = 100$ mA			0.55	V
Terminal capacitance	$C_t$	$V_R = 0$ V, $f = 1$ MHz		20		pF
Reverse recovery time *	$t_{rr}$	$I_F = I_R = 100$ mA $I_{rr} = 10$ mA, $R_L = 100$ $\Omega$		2		ns

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: 250 MHz 3. \*:  $t_{rr}$  measuring instrument



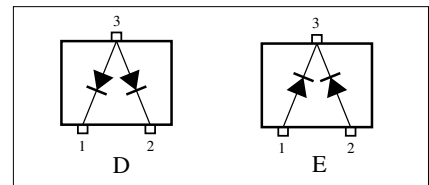
Note) The part number in the parenthesis shows conventional part number.

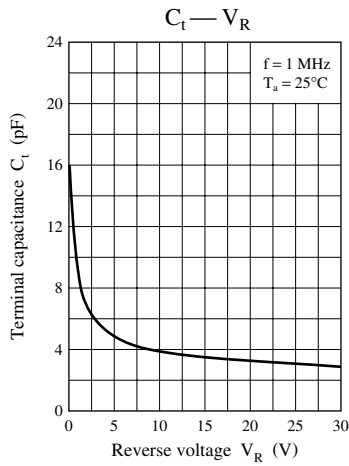
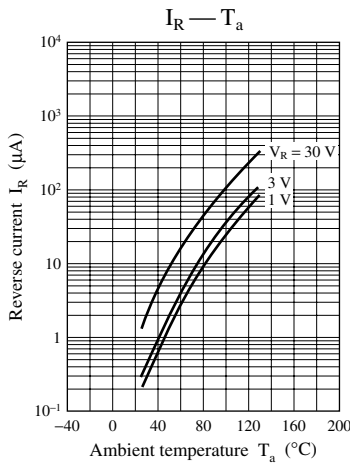
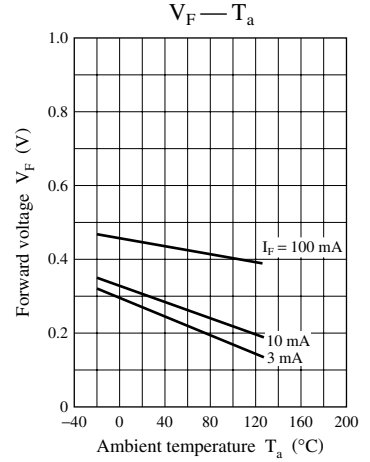
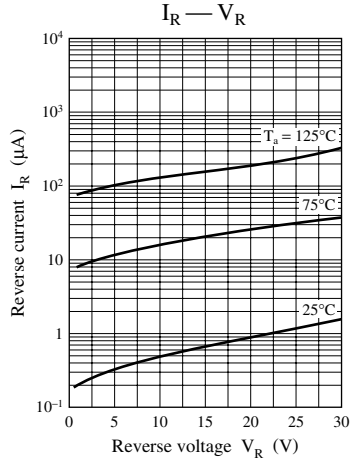
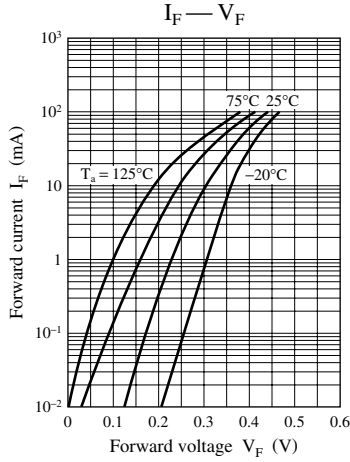


### Marking Symbol

- MA3X786D: M3Y
- MA3X786E: M3Z

### Internal Connection





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