

MA3X786D (MA786WA), MA3X786E (MA786WK)**Silicon epitaxial planar type**

For super high speed switching

For small current rectification

■ Features

- Two MA3X786 (MA786) is contained in one package
- Forward current (Average) $I_{F(AV)} = 100$ 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

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

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

Note) *1: Value of each diode in double diodes used.

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

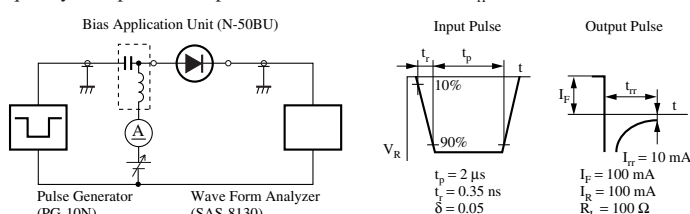
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 100$ mA			0.55	V
Reverse current	I_R	$V_R = 30$ V			15	μA
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, $R_L = 100 \Omega$		2.0		ns

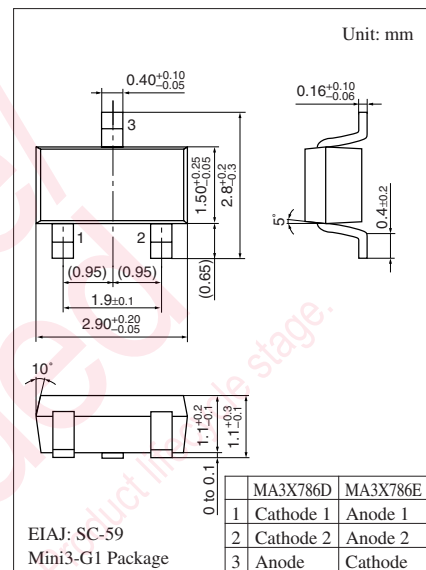
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. 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.

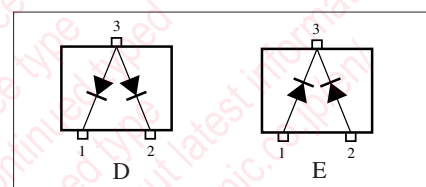
3. Absolute frequency of input and output is 250 MHz.

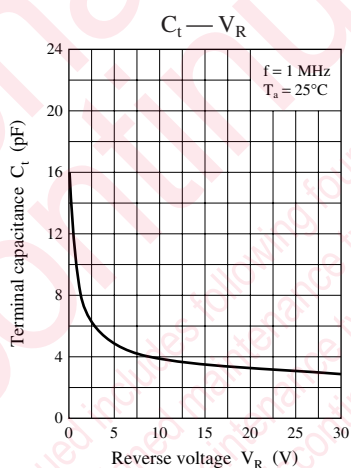
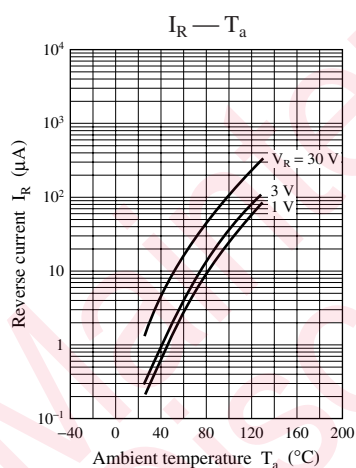
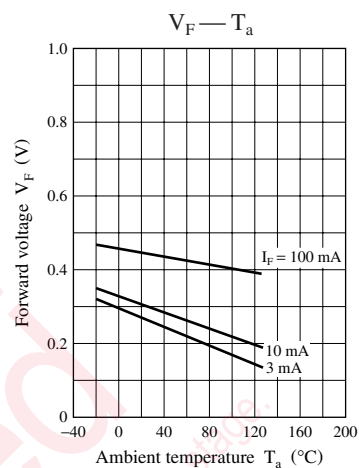
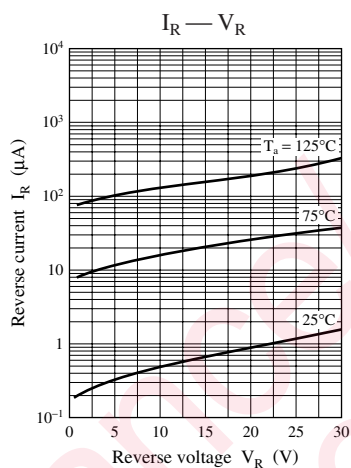
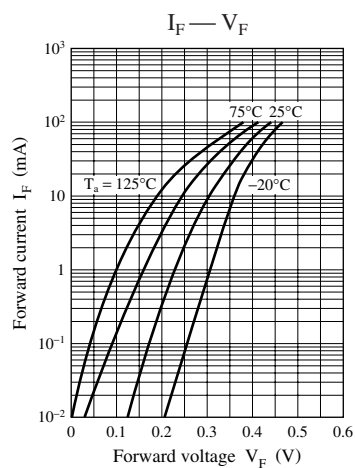
4. *: t_{rr} measurement circuit

Note) The part numbers in the parenthesis show conventional part number.

**Marking Symbol**

- MA3X786D: M3Y • MA3X786E: M3Z

Internal Connection



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Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.