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 $T_a = 25$ °C

Parameter		Rating	Unit	
Reverse voltage		30	V	
Repetitive peak reverse voltage		30	V	
Single	I_{FM}	300	mA	
Double *1		200		
Single	$I_{F(AV)}$	100	mA	
Double *1		70	10	
Non-repetitive peak forward		1	A	
			162 YE	
Junction temperature		125	°C	
Storage temperature		-55 to +125	°C	
	rse voltage Single Double *1 Single Double *1 k forward	$\begin{array}{c c} V_R \\ \hline V_{RRM} \\ \hline Single \\ \hline Double *I \\ \hline Single \\ \hline Double *I \\ \hline I_{F(AV)} \\ \hline Double *I \\ \hline K forward \\ \hline I_{FSM} \\ \hline \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	



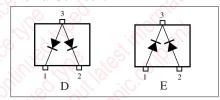
^{*2:} The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

Unit: mm 0.40^{+0.10} 0.40^{+0.10} 3 0.16^{+0.10} 0.16

Marking Symbol

MA3X786D: M3Y
 MA3X786E: M3Z

Internal Connection



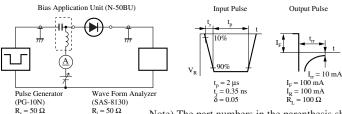
■ Electrical Characteristics $T_a = 25$ °C ± 3 °C

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	$V_{\rm F}$	I _F = 100 mA			0.55	V
Reverse current	I_R	$V_R = 30 \text{ V}$			15	μΑ
Terminal capacitance	C _t	$V_R = 0 \text{ V, f} = 1 \text{ MHz}$		20		pF
Reverse recovery time *	t _{rr}	$I_F = I_R = 100 \text{ mA}$		2.0		ns
		$I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$				

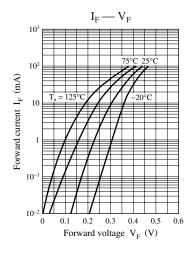
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

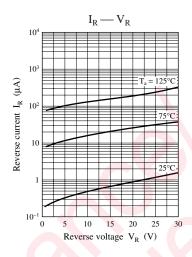
- 2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
- 3. Absolute frequency of input and output is 250 MHz.

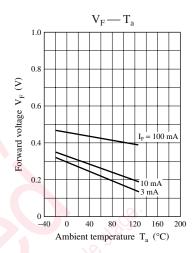
4. *: t_{rr} measurement circuit

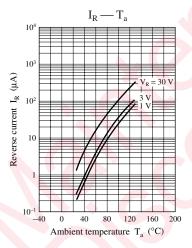


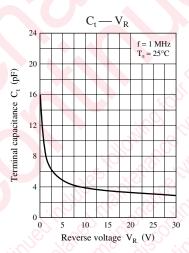
Note) The part numbers in the parenthesis show conventional part number.











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