# MA4X160A (MA160A)

### Silicon epitaxial planar type

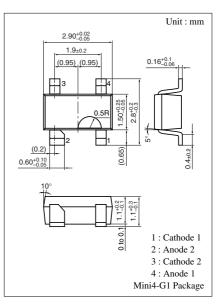
For switching circuits

#### Features

- Two isolated elements contained in one package, allowing highdensity mounting
- Centrosymmetrical wiring, allowing to free from the taping direction
- $\bullet$  Short reverse recovery time  $t_{\rm rr}$
- Small terminal capacitance,  $C_t$

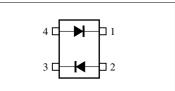
#### Absolute Maximum Ratings $T_a = 25^{\circ}C$

Parameter		Symbol	Rating	Unit	
Reverse voltage (DC)		V <sub>R</sub>	80	V	
Repetitive peak reverse voltage		V <sub>RRM</sub>	80	V	
Reverse voltage	Single	I <sub>F(AV)</sub>	100	mA	
(DC)	Double	I <sub>F(AV)</sub>	75	mA/Unit	
Repetitive peak forward current	Single	I <sub>FRM</sub>	225	mA	
	Double	I <sub>FRM</sub>	170	mA/Unit	
Non-repetitive peak forward surge current*	Single	I <sub>FSM</sub>	500	mA	
	Double	I <sub>FSM</sub>	375	mA/Unit	
Junction temperature		Tj	150	°C	
Storage temperature		T <sub>stg</sub>	-55 to +150	°C	



#### Marking Symbol: M1E

#### Internal Connection



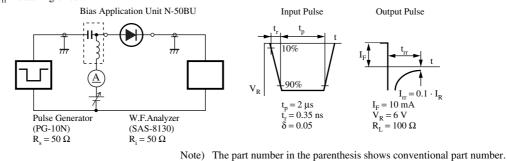
Note) \* : t = 1 s

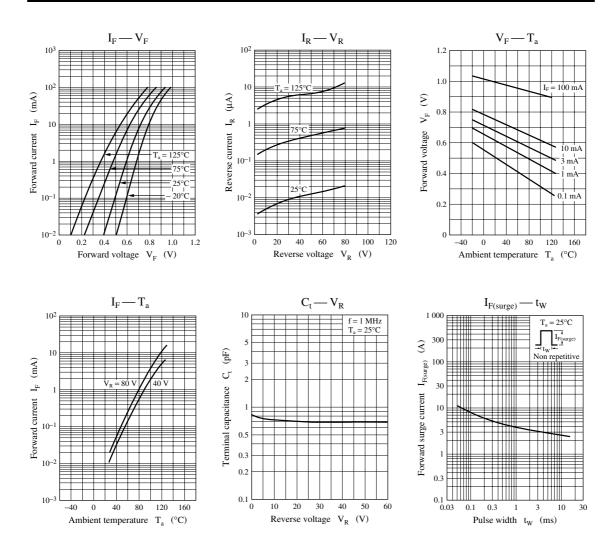
#### Electrical Characteristics $T_a = 25^{\circ}C$

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	I <sub>R</sub>	V <sub>R</sub> = 75 V			0.1	μΑ
Forward voltage (DC)	V <sub>F</sub>	$I_F = 100 \text{ mA}$		0.95	1.2	V
Reverse voltage (DC)	V <sub>R</sub>	$I_R = 100 \ \mu A$	80			V
Terminal capacitance	Ct	$V_R = 0 V, f = 1 MHz$		0.9	2	pF
Reverse recovery time*	t <sub>rr</sub>	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$			3	ns
		$I_{\rm rr} = 0.1 \cdot I_{\rm R}, R_{\rm L} = 100 \ \Omega$				

Note) 1. Rated input/output frequency: 100 MHz

2. \* : t<sub>rr</sub> measuring circuit





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