# **MA6X128** (MA128)

### Silicon epitaxial planar type

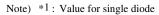
#### For switching circuits

#### ■ Features

- Four-element contained in one package, allowing high-density mounting
- Centrosymmetrical wiring, allowing to free from the taping direction
- The mirror image wiring of MA6X123 (MA123)
- Short reverse recovery time t<sub>rr</sub>
- Small terminal capacitance, Ct
- High breakdown voltage ( $V_R = 80 \text{ V}$ )

#### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	$V_R$	80	V
Peak reverse voltage	$V_{RM}$	80	V
Forward current (DC)*1	$I_F$	100	mA
Peak forward current*1	$I_{FM}$	225	mA
Non-repetitive peak forward surge current*1,2	I <sub>FSM</sub>	500	mA
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

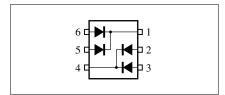


\*2: t = 1 s

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#### Marking Symbol: M2V

#### Internal Connection

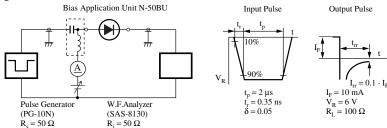


#### ■ Electrical Characteristics $T_a = 25$ °C

Symbol	Conditions	Min	Тур	Max	Unit
I <sub>R</sub>	$V_R = 75 \text{ V}$			100	nA
V <sub>F</sub>	$I_F = 100 \text{ mA}$			1.2	V
V <sub>R</sub>	$I_R = 100 \mu A$	80			V
Ct	$V_R = 0 V, f = 1 MHz$			2	pF
t <sub>rr</sub>	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$			3	ns
	$I_{R}$ $V_{F}$ $V_{R}$ $C_{t}$	$I_{R} \qquad V_{R} = 75 \text{ V}$ $V_{F} \qquad I_{F} = 100 \text{ mA}$ $V_{R} \qquad I_{R} = 100  \mu\text{A}$ $C_{t} \qquad V_{R} = 0 \text{ V},  \text{f} = 1 \text{ MHz}$	$I_{R} \qquad V_{R} = 75 \text{ V}$ $V_{F} \qquad I_{F} = 100 \text{ mA}$ $V_{R} \qquad I_{R} = 100 \mu\text{A} \qquad \qquad 80$ $C_{t} \qquad V_{R} = 0 \text{ V},  f = 1 \text{ MHz}$ $t_{tr} \qquad I_{F} = 10 \text{ mA}, V_{R} = 6 \text{ V}$	$I_{R} \qquad V_{R} = 75 \text{ V}$ $V_{F} \qquad I_{F} = 100 \text{ mA}$ $V_{R} \qquad I_{R} = 100 \mu\text{A} \qquad \qquad 80$ $C_{t} \qquad V_{R} = 0 \text{ V},  f = 1 \text{ MHz}$ $t_{rr} \qquad I_{F} = 10 \text{ mA}, V_{R} = 6 \text{ V}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

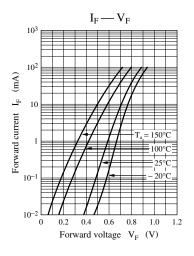
#### Note) 1. Rated input/output frequency: 100 MHz

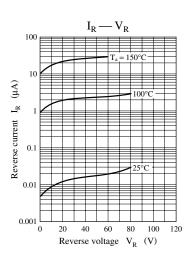
2. \*: t<sub>rr</sub> measuring circuit

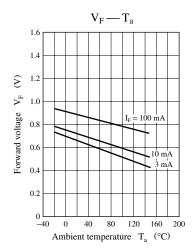


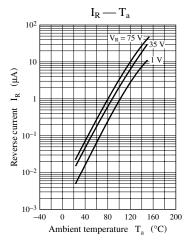
Note) The part numbers in the parenthesis show conventional part number.

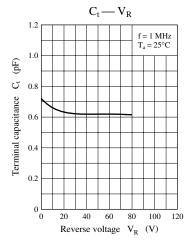
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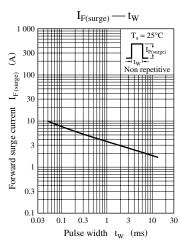












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