

# MA2C196 (MA196)

Silicon epitaxial planar type

For switching circuits

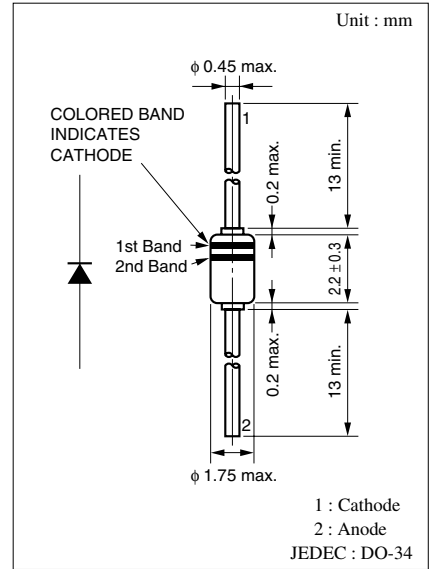
### ■ Features

- Low forward dynamic resistance  $r_f$
- Small terminal capacitance,  $C_t$

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

Parameter	Symbol	Rating	Unit
Forward voltage (DC)	$V_R$	50	V
Repetitive peak reverse voltage	$V_{RRM}$	50	V
Average forward current	$I_{F(AV)}$	100	mA
Repetitive peak forward current	$I_{FRM}$	225	mA
Non-repetitive peak forward surge current*	$I_{FSM}$	500	mA
Junction temperature	$T_j$	200	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +200	$^\circ\text{C}$

Note) \* :  $t = 1 \text{ s}$

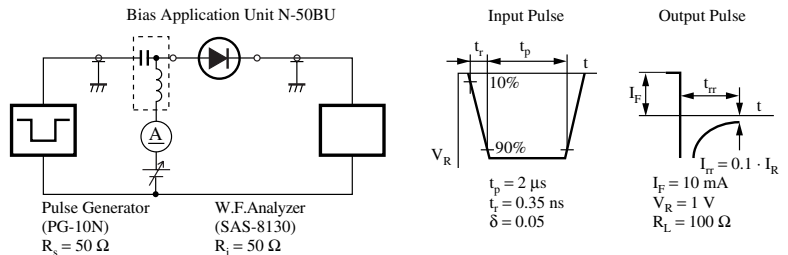


### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	$I_{R1}$	$V_R = 15 \text{ V}$			5	nA
	$I_{R2}$	$V_R = 50 \text{ V}$			10	nA
	$I_{R3}$	$V_R = 50 \text{ V}, T_a = 150^\circ\text{C}$			100	$\mu\text{A}$
Forward voltage (DC)	$V_F$	$I_F = 100 \text{ mA}$			1.2	V
Reverse voltage (DC)	$V_R$	$I_R = 100 \mu\text{A}$	50			V
Terminal capacitance	$C_t$	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$			4	pF
Forward dynamic resistance	$r_{f1}$	$I_F = 3 \text{ mA}, f = 30 \text{ MHz}$			2.5	$\Omega$
	$r_{f2}$	$I_F = 3 \text{ mA}, f = 30 \text{ MHz}$			3.6	$\Omega$
Reverse recovery time*	$t_{rr}$	$I_F = 10 \text{ mA}, V_R = 1 \text{ V}$ $I_{tr} = 0.1 \cdot I_R, R_L = 100 \Omega$			0.2	ms

Note) 1. Rated input/output frequency: 2.5 kHz

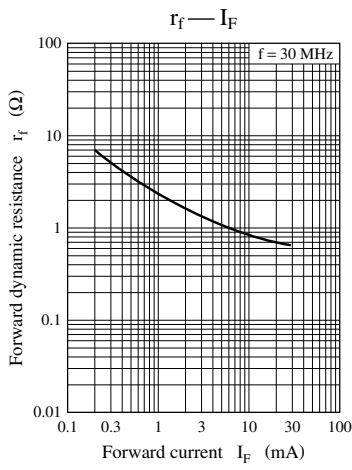
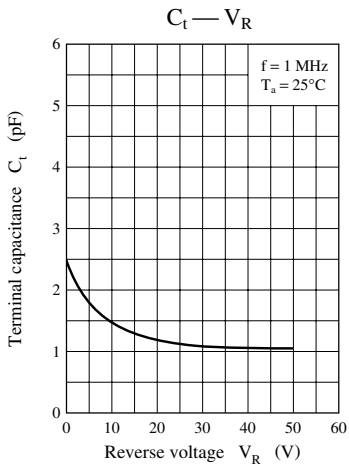
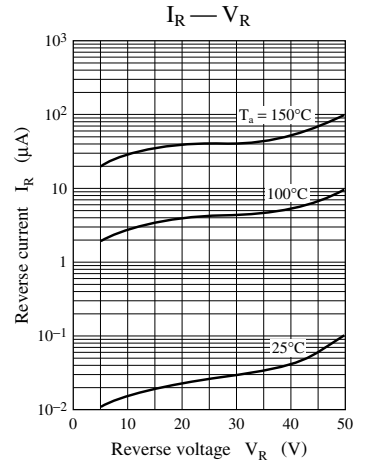
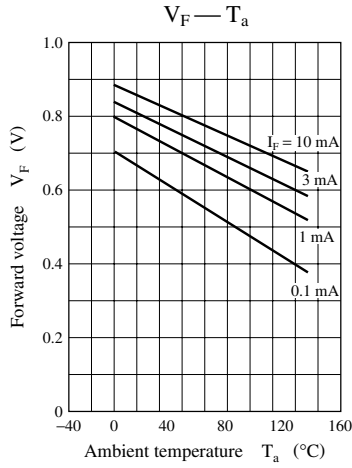
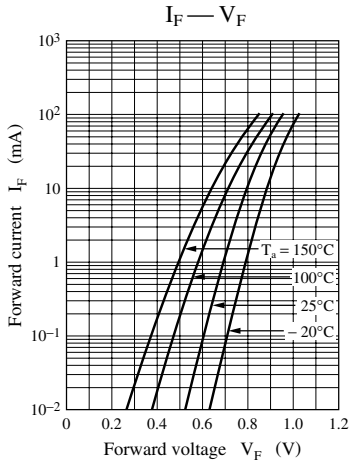
2. \* :  $t_{rr}$  measuring circuit



### ■ Cathode Indication

Type No.	MA2C196	
Color	1st Band	Green
	2nd Band	Green

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



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