

# MA2C178, MA2C179

## Silicon epitaxial planar type

For high-speed switching circuits

### ■ Features

- Large forward current  $I_{FRM}$
- High switching speed
- Small terminal capacitance,  $C_t$

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	MA2C178	40	V
	MA2C179	80	
Repetitive peak reverse voltage	MA2C178	40	V
	MA2C179	80	
Average forward current	$I_{F(AV)}$	200	mA
Repetitive peak forward current	$I_{FRM}$	600	mA
Non-repetitive peak forward surge current*	$I_{FSM}$	1	A
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 $T_a = 25^\circ\text{C}$

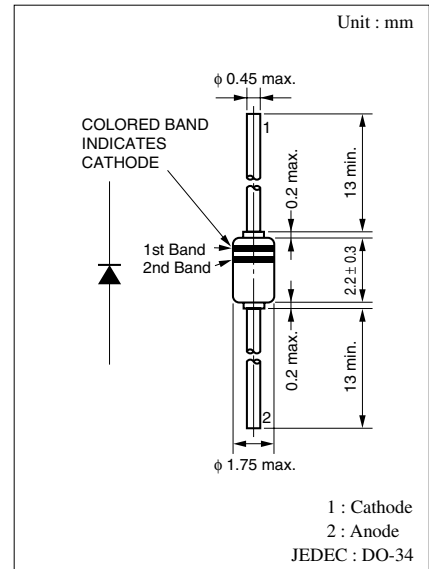
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	MA2C178	$V_R = 15 \text{ V}$			50	nA
	MA2C179					
	MA2C178	$V_R = 35 \text{ V}$			500	nA
	MA2C179					
	MA2C178	$V_R = 35 \text{ V}, T_a = 150^\circ\text{C}$			100	$\mu\text{A}$
	MA2C179					
Forward voltage (DC)	$V_F$	$I_F = 200 \text{ mA}$			1.1	V
Terminal capacitance	$C_t$	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$			4	pF
Reverse recovery time*	$t_{rr}$	$I_F = 10 \text{ mA}, V_R = 1 \text{ V}$ $I_{tr} = 0.1 \cdot I_R, R_L = 100 \Omega$			20	ns

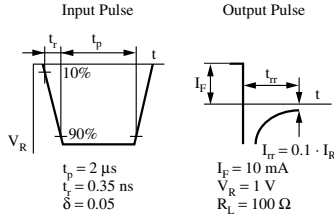
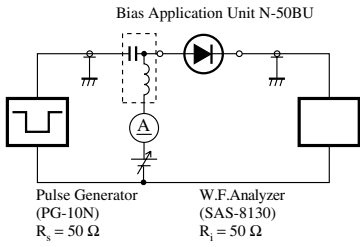
Note) 1. Rated input/output frequency: 50 MHz

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

### ■ Cathode Indication

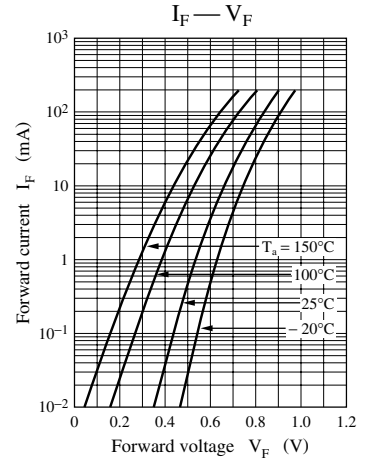
Type No.	MA2C178	MA2C179
Color		
1st Band	Violet	Violet
2nd Band	White	Green



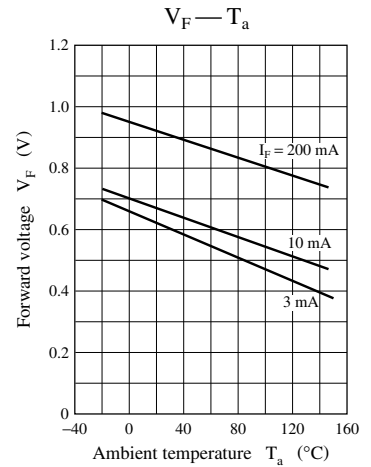
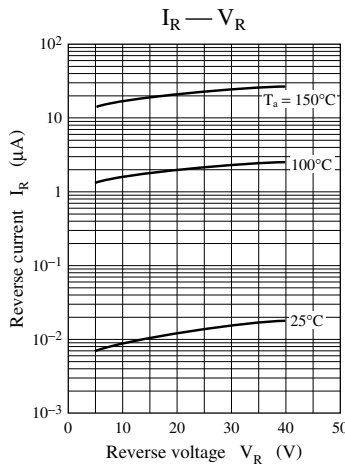
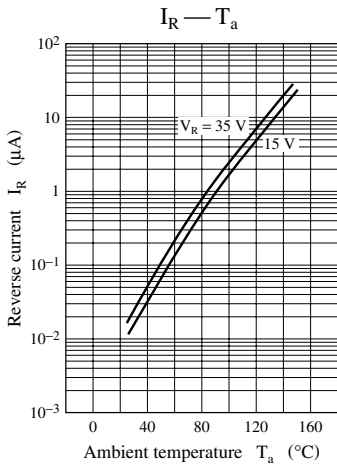


$t_{rr}$  measuring circuit

Common characteristics charts



Characteristics charts of MA2C178



Characteristics charts of MA2C179

