

# MA2C178 (MA178), MA2C179 (MA179)

Silicon epitaxial planar type

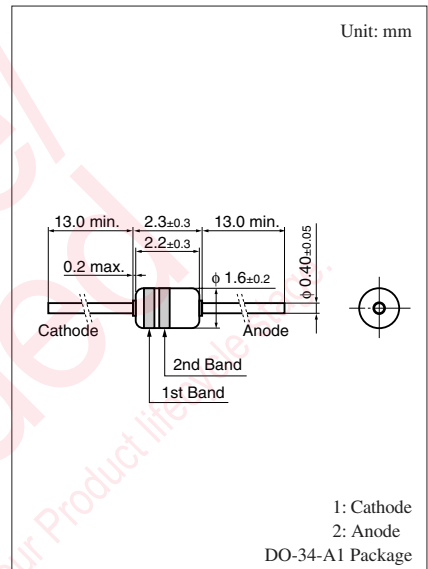
For high-speed switching circuits

**■ Features**

- Large repetitive peak forward current  $I_{FRM}$
- Small terminal capacitance  $C_t$

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

Parameter	Symbol	Rating	Unit	
Reverse voltage	MA2C178	$V_R$	40	V
	MA2C179		80	
Repetitive peak reverse voltage	MA2C178	$V_{RRM}$	40	V
	MA2C179		80	
Forward current (Average)	$I_{F(AV)}$	200	mA	
Repetitive peak forward current	$I_{FRM}$	600	mA	
Non-repetitive peak forward surge current *	$I_{FSM}$	1.0	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**  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 200\text{ mA}$			1.1	V
Reverse current	MA2C178	$I_{R1}$	$V_R = 15\text{ V}$		50	nA
	MA2C179					
	MA2C178	$I_{R2}$	$V_R = 35\text{ V}$		500	nA
	MA2C179		$V_R = 75\text{ V}$		500	
	MA2C178	$I_{R3}$	$V_R = 35\text{ V}, T_a = 150^\circ\text{C}$		100	$\mu\text{A}$
MA2C179	$V_R = 75\text{ V}, T_a = 150^\circ\text{C}$			100		
Terminal capacitance	$C_t$	$V_R = 0\text{ V}, f = 1\text{ MHz}$			4	pF
Reverse recovery time *	$t_{rr}$	$I_F = 10\text{ mA}, V_R = 1\text{ V}$ $I_{rr} = 0.1 I_R, R_L = 100\ \Omega$			20	ns

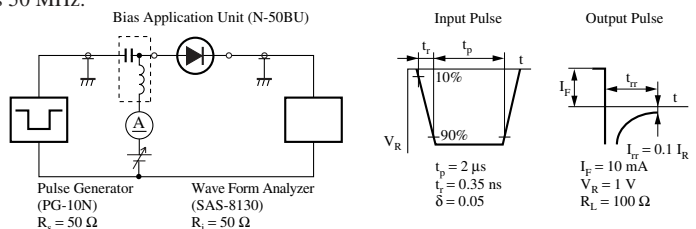
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 50 MHz.

3. \*:  $t_{rr}$  measurement circuit

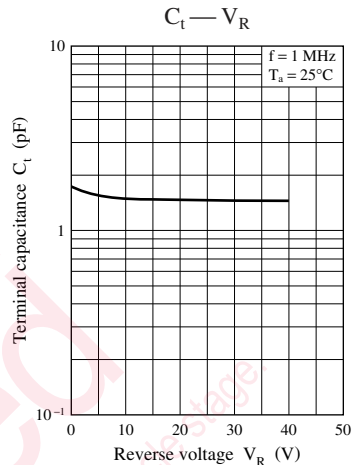
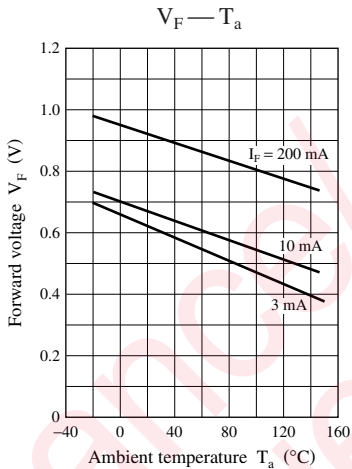
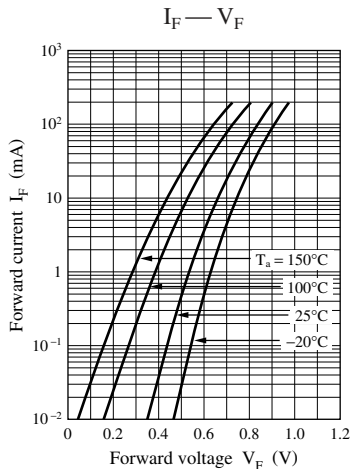
**■ Cathode Indication**

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

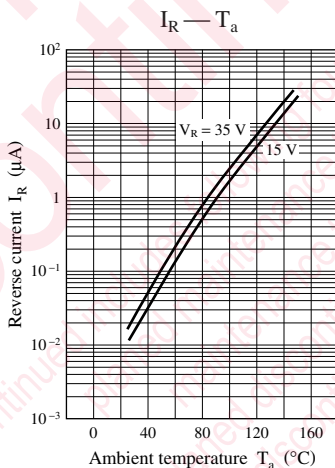
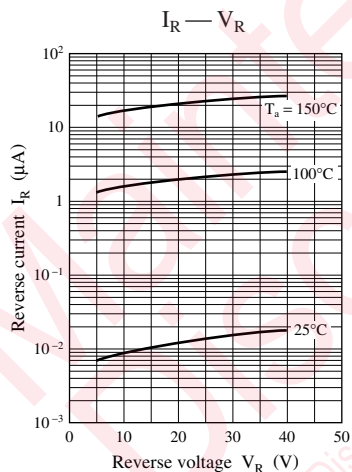


Note) The part numbers in the parenthesis show conventional part number.

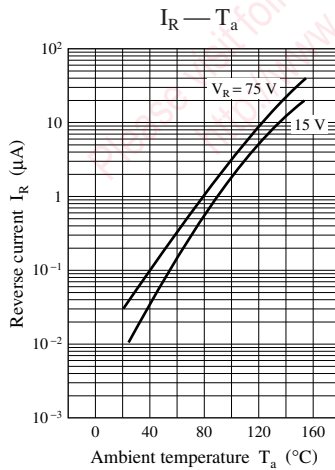
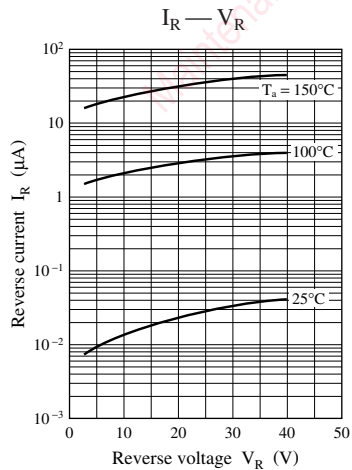
Common characteristics charts



Characteristics charts of MA2C178



Characteristics charts of MA2C179



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