

MA2C178, MA2C179 (MA178, MA179)

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		
Repetitive peak reverse voltage	MA2C178	40	V
	MA2C179		
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 $T_a = 25^\circ\text{C}$

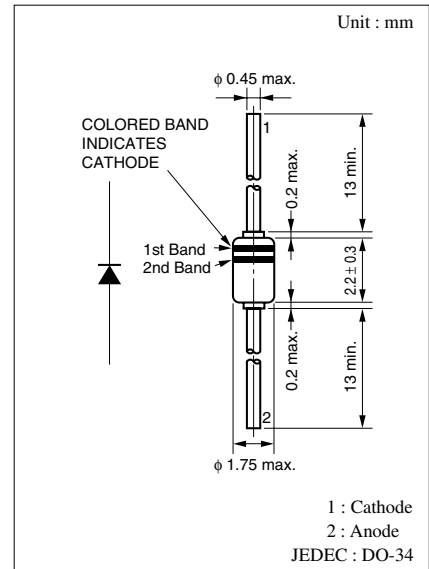
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	MA2C178	I_{R1}	$V_R = 15 \text{ V}$		50	nA
	MA2C179					
	MA2C178	I_{R2}	$V_R = 35 \text{ V}$		500	nA
	MA2C179		$V_R = 75 \text{ V}$		500	
	MA2C178	I_R	$V_R = 35 \text{ V}, T_a = 150^\circ\text{C}$		100	μA
	MA2C179		$V_R = 75 \text{ V}, T_a = 150^\circ\text{C}$		100	
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}	$I_F = 10 \text{ mA}, V_R = 1 \text{ V}$ $I_{rr} = 0.1 \cdot I_R, R_L = 100 \Omega$			20	ns

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

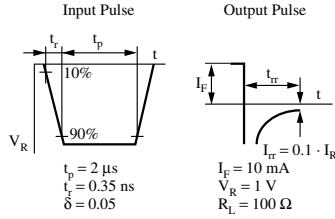
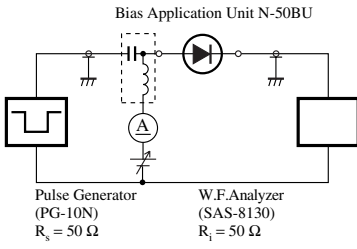
2. * : t_{rr} measuring circuit

■ Cathode Indication

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

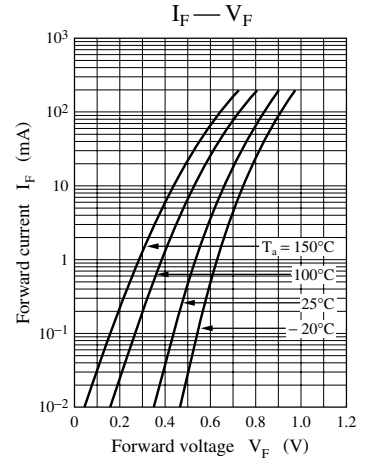


Note) The part numbers in the parenthesis show conventional part number.

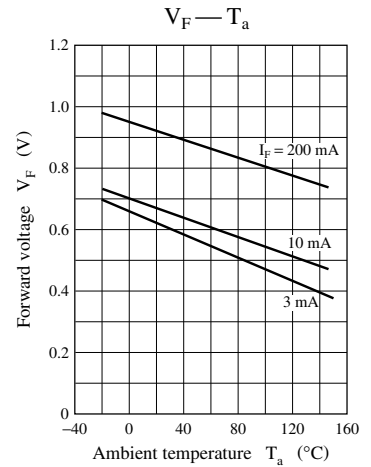
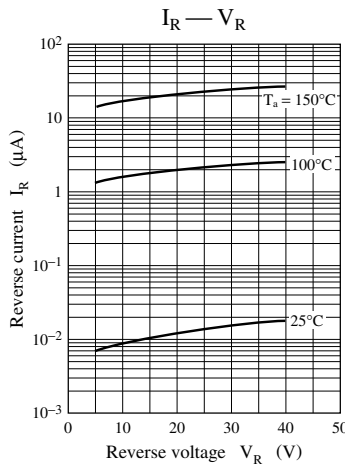
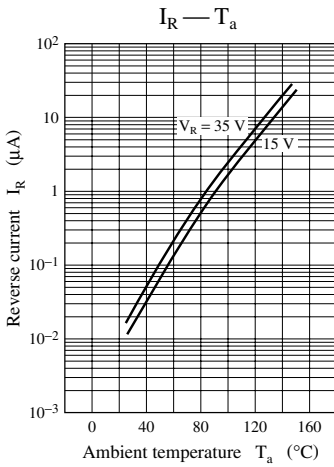


t_{rr} measuring circuit

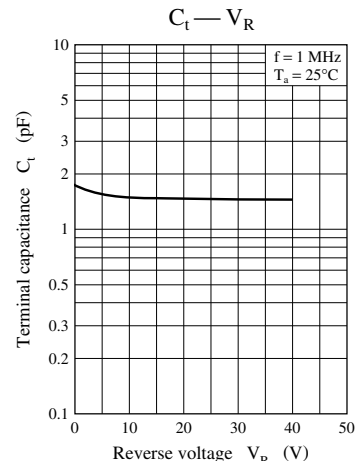
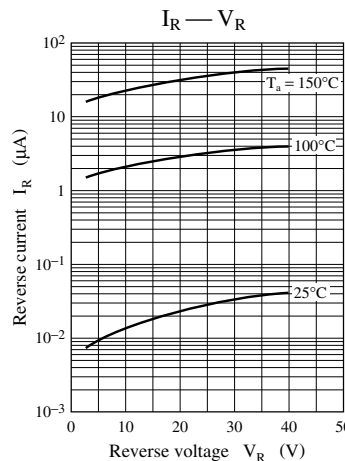
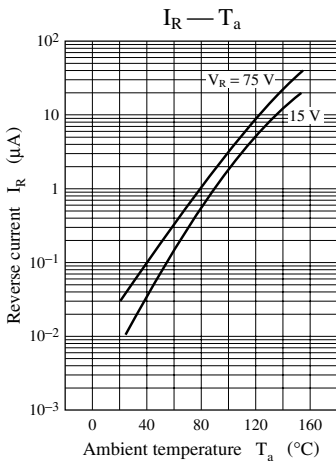
Common characteristics charts



Characteristics charts of MA2C178



Characteristics charts of MA2C179



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