

# MA2B150, MA2B161, MA2B162, MA2B162A (MA150, MA161, MA162, MA162A)

Silicon epitaxial planar type

For switching circuits

## ■ Features

- Short reverse recovery time  $t_{rr}$
- Small terminal capacitance,  $C_t$

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	$V_R$	35	V
		50	
		75	
		120	
Repetitive peak reverse voltage	$V_{RRM}$	35	V
		50	
		75	
		120	
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 +150	$^\circ\text{C}$

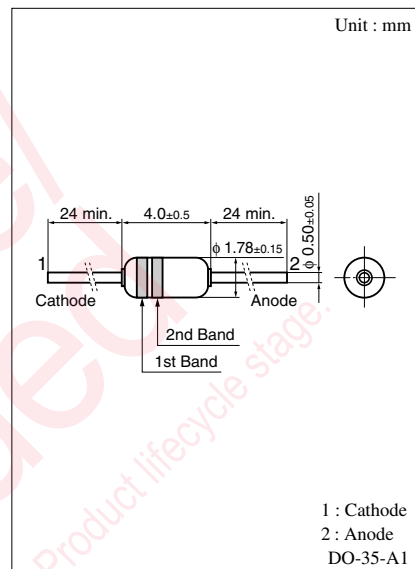
Note) \* :  $t = 1 \text{ s}$

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	MA2B150	$V_R = 15 \text{ V}$			0.025	$\mu\text{A}$
		$V_R = 30 \text{ V}$			0.1	
	MA2B161	$V_R = 15 \text{ V}$			0.025	
		$V_R = 50 \text{ V}$			5	
	MA2B162	$V_R = 20 \text{ V}$		0.012	0.025	
		$V_R = 75 \text{ V}$			5	
	MA2B162A	$V_R = 20 \text{ V}$		0.012	0.025	
		$V_R = 120 \text{ V}$			5	
	MA2B150	$V_R = 35 \text{ V}, T_a = 150^\circ\text{C}$			100	
	MA2B161	$V_R = 50 \text{ V}, T_a = 150^\circ\text{C}$			100	
Forward voltage (DC)	$V_F$	$I_F = 100 \text{ mA}$		0.95	1.2	V
Reverse voltage (DC)	MA2B150	$I_R = 5 \mu\text{A}$	35			V
Terminal capacitance		$V_R = 0 \text{ V}, f = 1 \text{ MHz}$		0.9	2	pF
Reverse recovery time*	MA2B150	$I_F = 10 \text{ mA}, V_R = 1 \text{ V}, R_L = 100 \Omega$ Measure when $I_{rr} = 0.1 \cdot I_R$			10	ns
	MA2B161/162/162A			2.2	4	

## ■ Cathode Indication

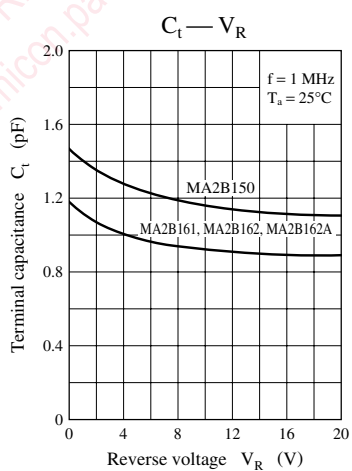
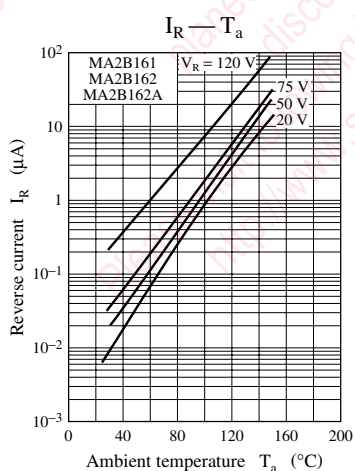
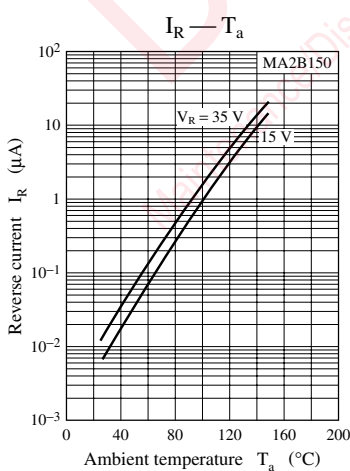
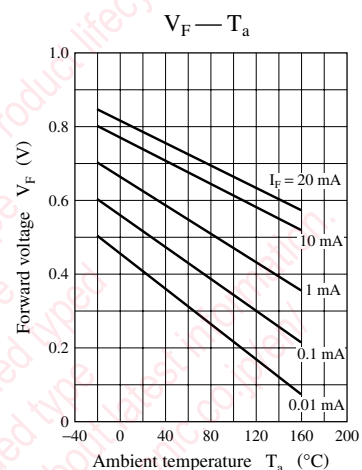
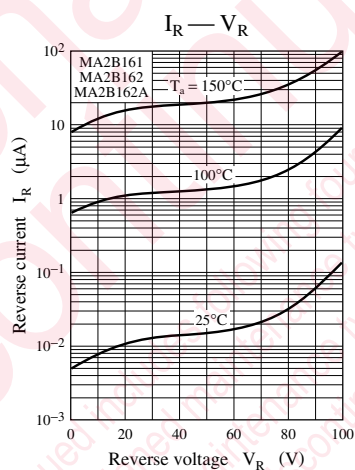
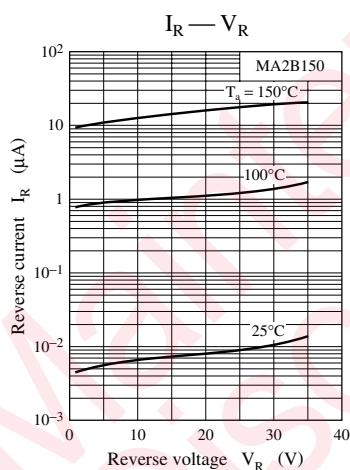
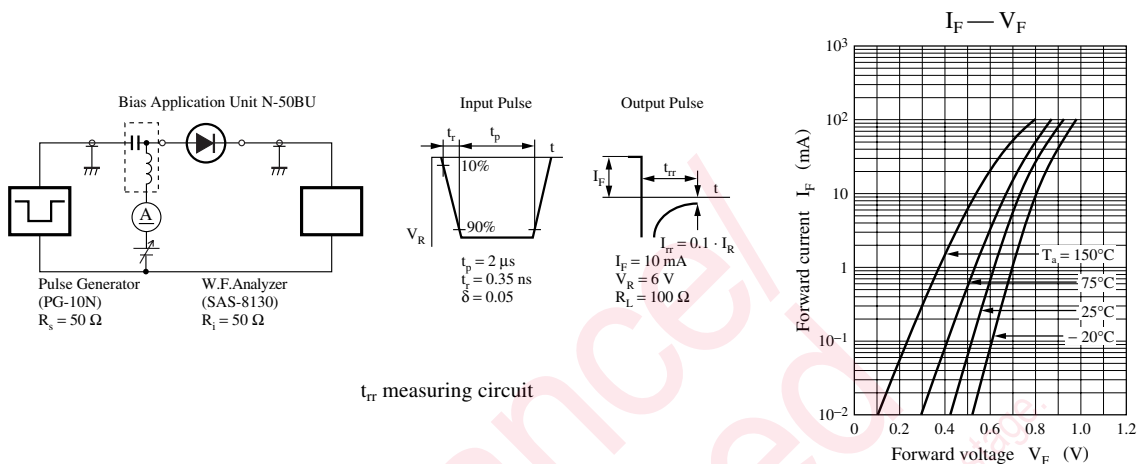
Type No.		MA2B150	MA2B161	MA2B162	MA2B162A
Color	1st Band	White	Green	Violet	Black
	2nd Band	—	—	—	Black



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

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

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



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