

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

Silicon epitaxial planar type

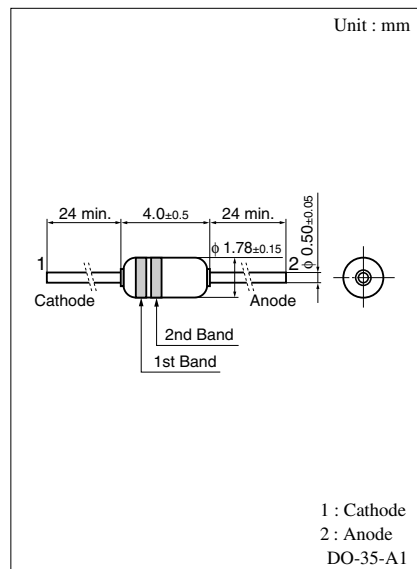
For switching circuits

■ 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)	MA2B150	V_R	35	V
	MA2B161			
	MA2B162			
	MA2B162A			
Repetitive peak reverse voltage	MA2B150	V_{RRM}	35	V
	MA2B161			
	MA2B162			
	MA2B162A			
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) * : $t = 1$ s

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

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

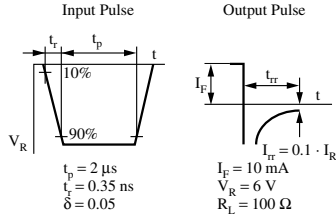
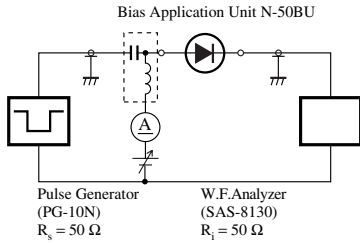
■ Cathode Indication

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

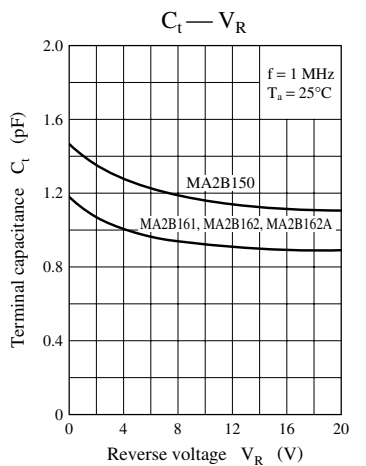
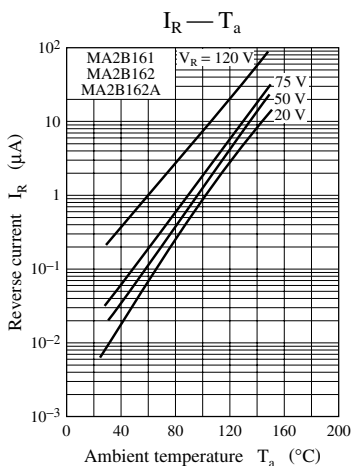
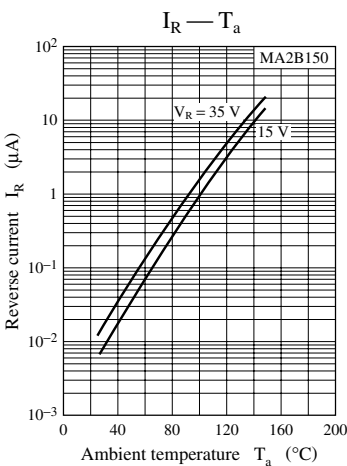
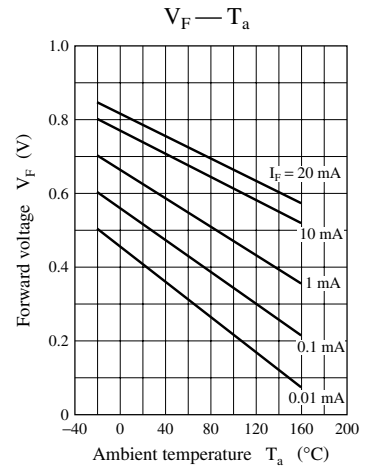
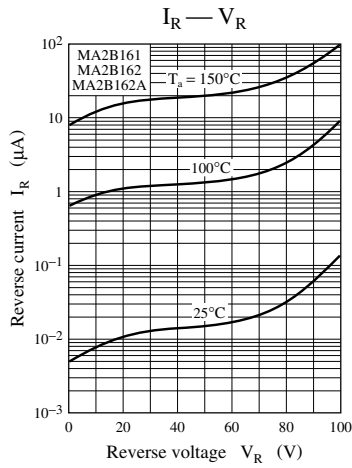
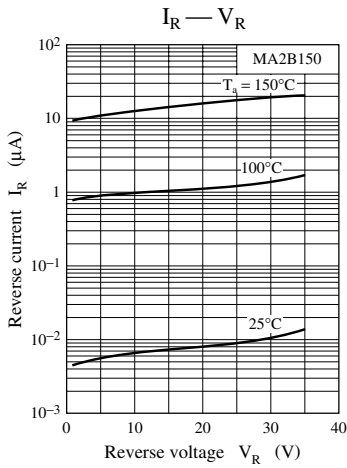
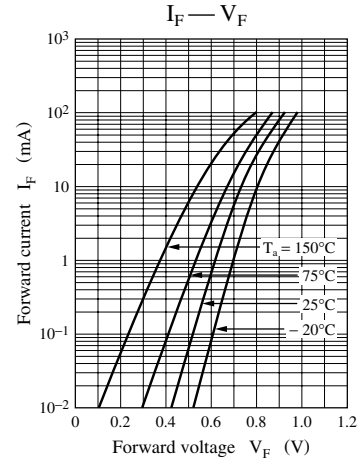
Note) 1. Rated input/output frequency:
100 MHz

2. * : t_{rr} measuring circuit

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



t_{tr} measuring circuit



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