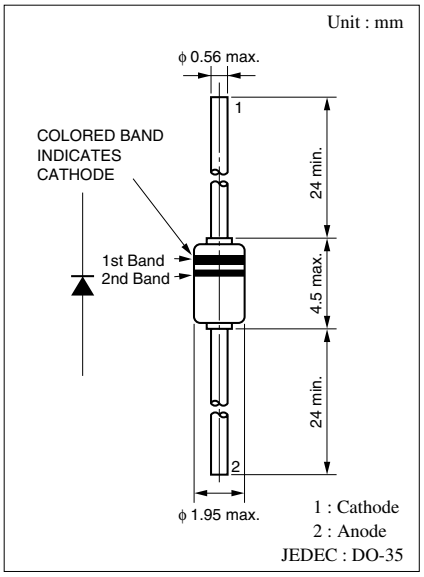
MA2B150, MA2B161, MA2B162, MA2B162A

Silicon epitaxial planar type

For switching circuits



■ Features

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

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter		Symbol	Rating	Unit
Reverse voltage (DC)	MA2B150	V_R	35	V
	MA2B161		50	
	MA2B162		75	
	MA2B162A		120	
Repetitive peak reverse voltage	MA2B150	V_{RRM}	35	V
	MA2B161		50	
	MA2B162		75	
	MA2B162A		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	°C
Storage temperature		T_{stg}	−55 to +150	°C

Note) * : t = 1 s

■ Electrical Characteristics $T_a = 25°C$

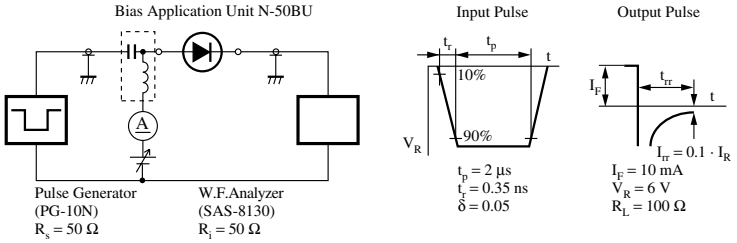
Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	MA2B150	I_R	V_R = 15 V			0.025	μA
			V_R = 30 V			0.1	
	MA2B161		V_R = 15 V			0.025	
			V_R = 50 V			5	
	MA2B162		V_R = 20 V		0.012	0.025	
			V_R = 75 V			5	
	MA2B162A		V_R = 20 V		0.012	0.025	
			V_R = 120 V			5	
	MA2B150		V_R = 35 V,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

■ Cathode Indication

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

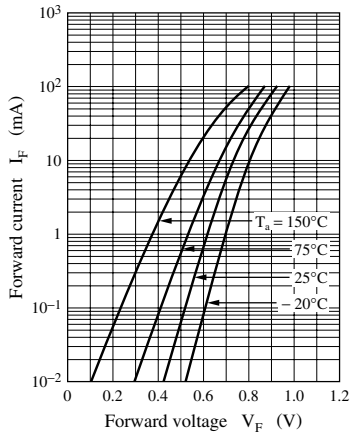
Note) 1. Rated input/output frequency: 100 MHz

2. * : t_{rr} measuring circuit

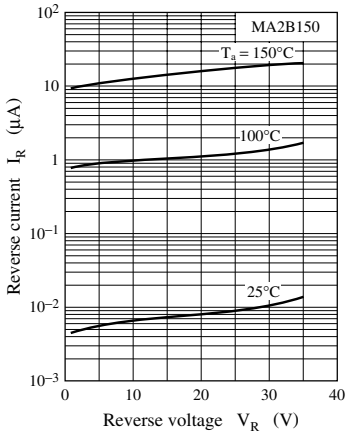


t_{rr} measuring circuit

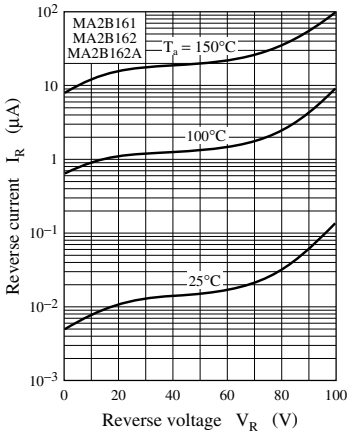
I_F — V_F



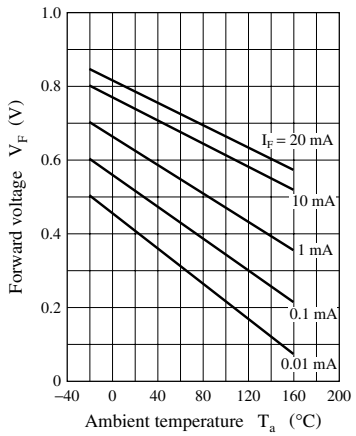
I_R — V_R



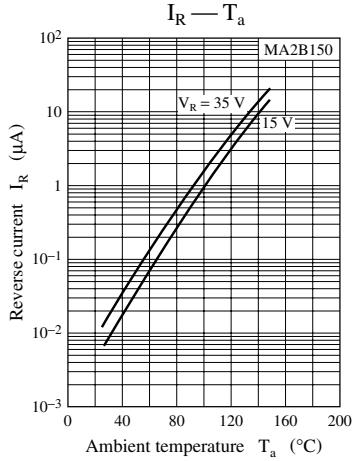
I_R — V_R



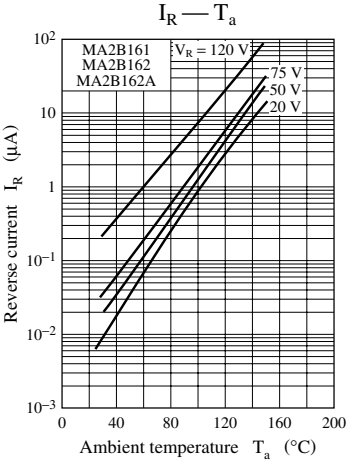
V_F — T_a



I_R — T_a



I_R — T_a



C_t — V_R