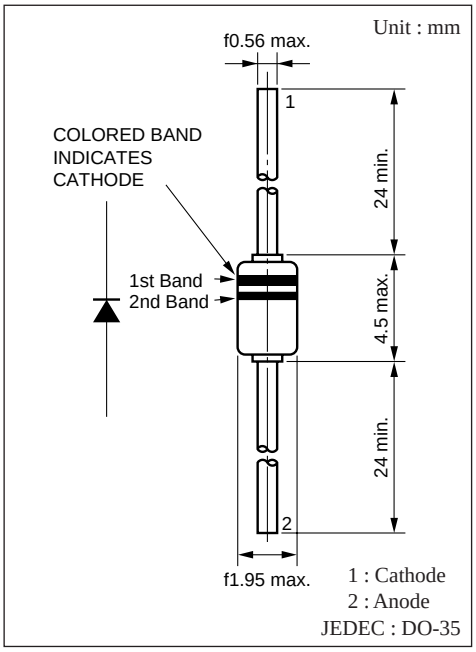
MA150, MA161, MA162, MA162A

Silicon epitaxial planer type

For switching circuits



■ Features

- Short reverse recovery period t_{rr}
- Small capacity between pins, C_t

■ Absolute Maximum Ratings (Ta= 25˚C)

Parameter		Symbol	Rating	Unit
Reverse voltage (DC)	MA150	V_R	35	V
	MA161		50	
	MA162		75	
	MA162A		120	
Repetitive peak reverse voltage	MA150	V_{RRM}	35	V
	MA161		50	
	MA162		75	
	MA162A		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 + 200	˚C

* t=1s

■ Electrical Characteristics (Ta= 25˚C)

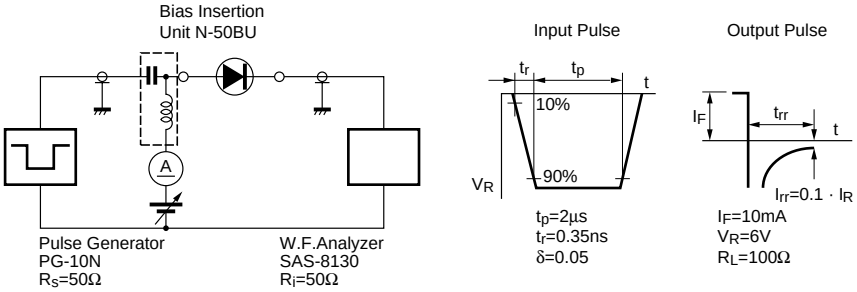
Parameter		Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	MA150	I_R	V_R=15V			0.025	μA
			V_R= 30V			0.1	
	MA161		V_R=15V			0.025	
			V_R= 50V			5	
	MA162		V_R= 20V		0.012	0.025	
			V_R= 75V		0.1	5	
	MA162A		V_R= 20V		0.012	0.025	
			V_R=120V			5	
	MA150		V_R= 35V, Ta= 150˚C			100	
	MA161		V_R= 50V, Ta=150˚C			100	
	MA162		V_R= 75V, Ta=150˚C		50	100	
	MA162A		V_R= 75V, Ta=150˚C		50	100	
Forward voltage (DC)		V_F	I_F=100mA		0.95	1.2	V
Reverse voltage (DC)	MA150	V_R	I_R= 5μA	35			V
Terminal capacitance		C_t	V_R= 0V, f=1MHz		0.9	2	pF
Reverse recovery time	MA150	t_{rr} *	I_F=10mA, V_R=1V, R_L=100Ω,			10	ns
	MA161/162/162A		Measure when I_{rr}= 0.1 · I_R		2.2	4	

❖ Rated input/output frequency : 100MHz

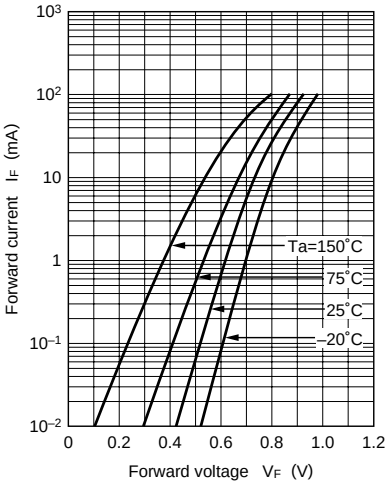
■ Cathode Indication

Type No.		MA150	MA161	MA162	MA162A
Color	1st Band	White	Green	Violet	Black
	2nd Band	—	—	—	Black

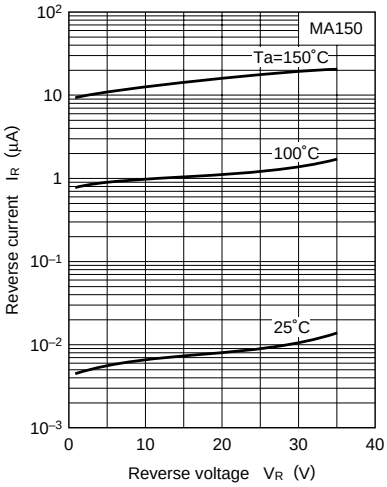
* t_{rr} measuring circuit



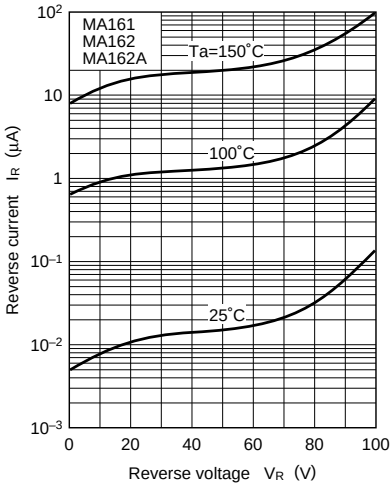
$I_F - V_F$



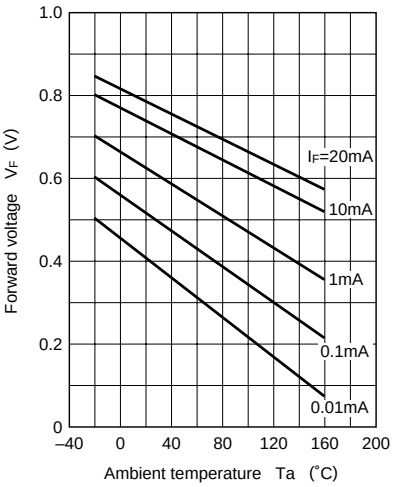
$I_F - V_F$



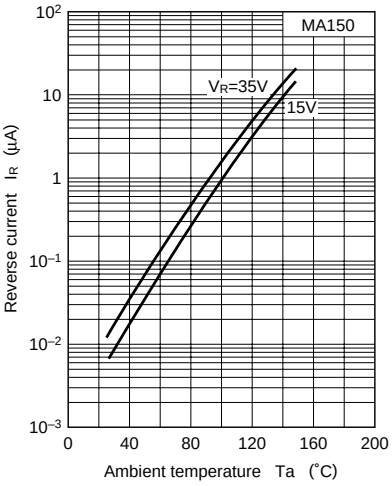
$I_R - V_R$



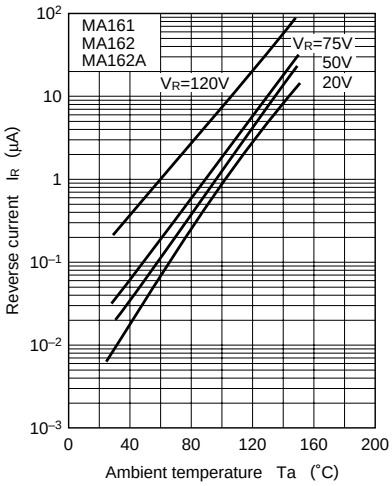
$V_F - Ta$



$I_R - Ta$



$I_R - Ta$



$C_t - V_R$