

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 ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	MA150	35	V
	MA161	50	
	MA162	75	
	MA162A	120	
Repetitive peak reverse voltage	MA150	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	$^\circ\text{C}$
Storage temperature	T_{stg}	- 55 to + 200	$^\circ\text{C}$

* $t = 1\text{s}$

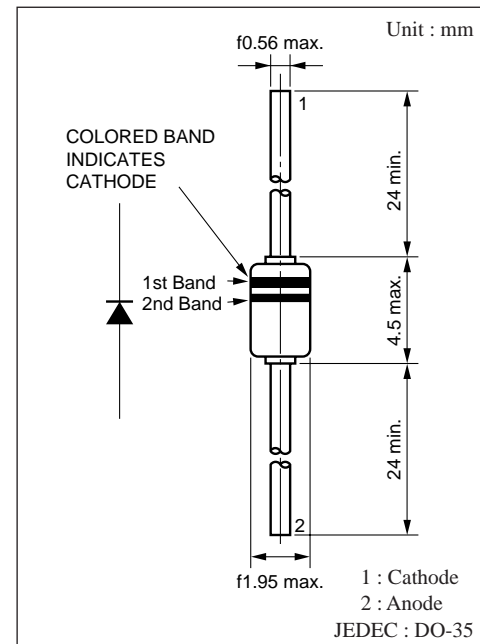
■ Electrical Characteristics ($T_a = 25^\circ\text{C}$)

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

