

Silicon epitaxial planer type

For switching circuits

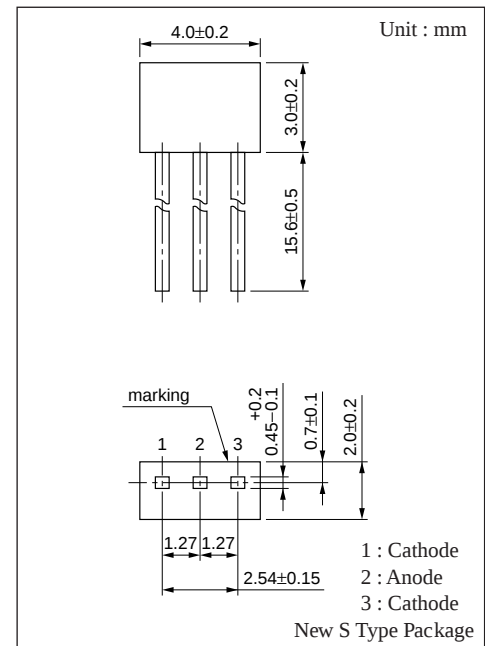
■ Features

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

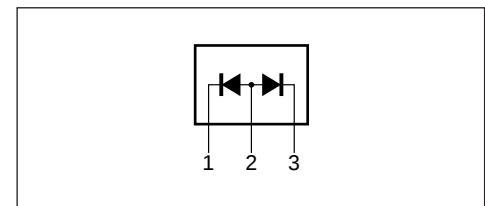
■ Absolute Maximum Ratings (Ta= 25°C)

Parameter		Symbol	Rating	Unit
Reverse voltage (DC)	MA175WA	V_R	40	V
	MA176WA		80	
Peak reverse voltage	MA175WA	V_{RM}	40	V
	MA176WA		80	
Forward current (DC)	Single	I_F	100	mA
	Double		150	
Peak forward current	Single	I_{FM}	225	mA
	Double		340	
Non-repetitive peak forward surge current	Single	I_{FSM}^*	500	mA
	Double		750	
Junction temperature		T_j	150	$^{\circ}\text{C}$
Storage temperature		T_{stg}	- 55 to +150	$^{\circ}\text{C}$

* t=1s



■ Internal Connection

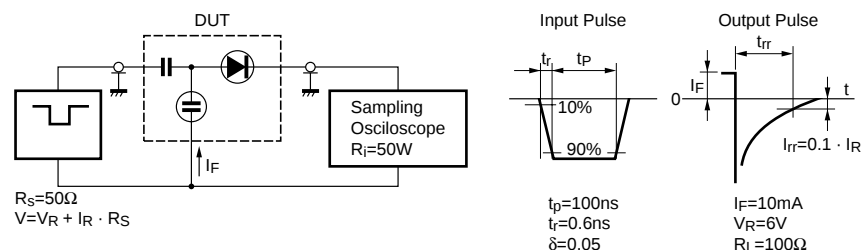


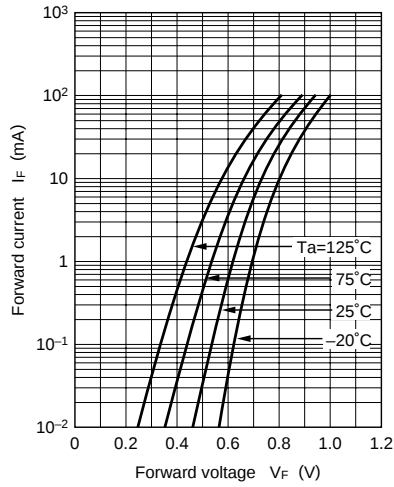
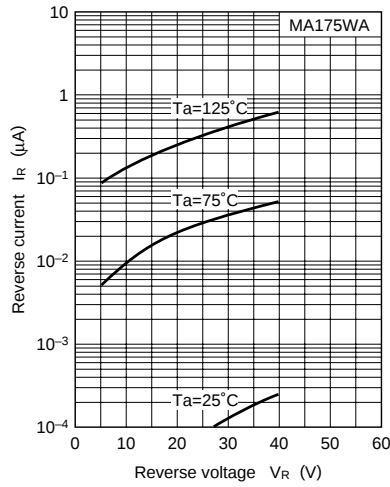
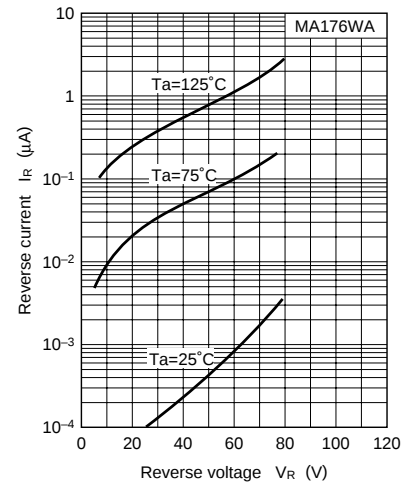
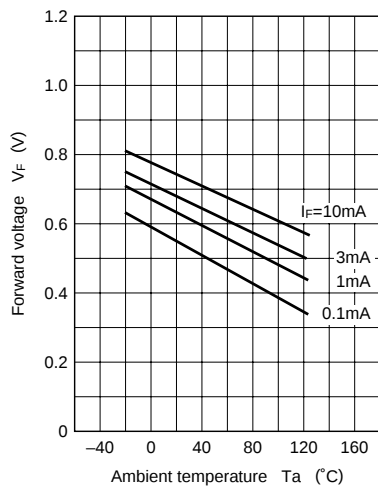
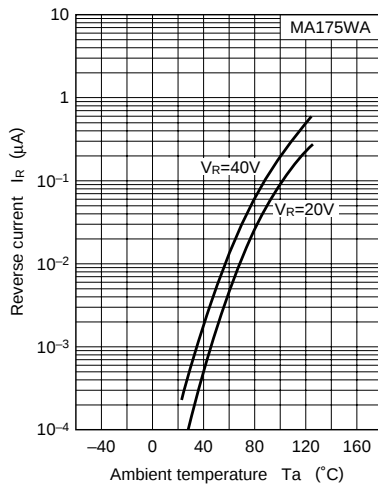
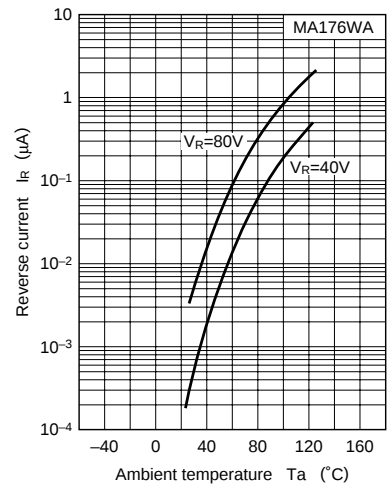
■ Electrical Characteristics (Ta= 25°C)

Parameter		Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	MA175WA	I _R	V _R = 35V			0.1	μA
	MA176WA		V _R = 75V			0.1	
Forward voltage (DC)		V _F	I _F =100mA			1.2	V
Reverse voltage (DC)	MA175WA	V _R	I _R =100μA	40			V
	MA176WA			80			
Terminal capacitance		C _t	V _R = 0V, f=1MHz			4	pF
Reverse recovery time		t _{rr} *	I _F =10mA, V _R = 6V I _{rr} = 0.1 · I _R , R _L =100Ω			10	ns

Note 1 : Rated input/output frequency : 100MHz

2 : * t_{π} measuring circuit



$I_F - V_F$  $I_R - V_R$  $I_R - V_R$  $V_F - T_a$  $I_R - T_a$  $I_R - T_a$  $C_t - V_R$ 