

MA204WK, MA205WK

Silicon epitaxial planer type

For switching circuits

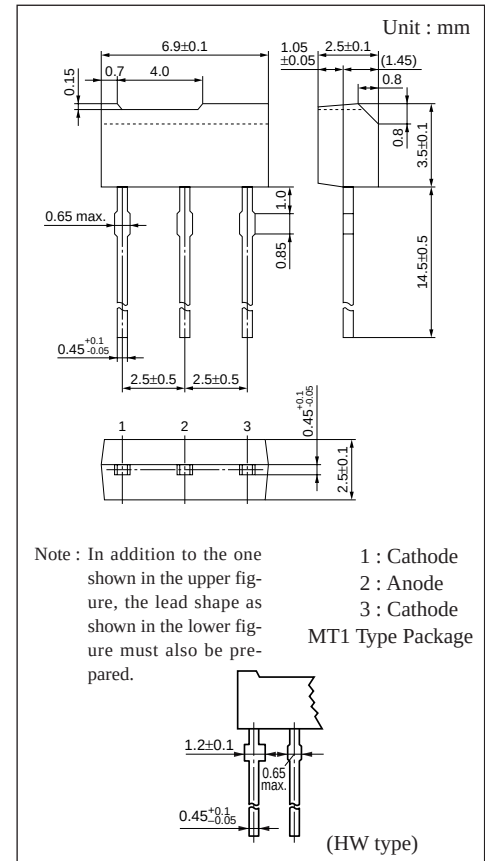
■ Features

- Short reverse recovery period t_{rr}
- Small capacity between pins, C_t
- Supply in radial taping manner possible

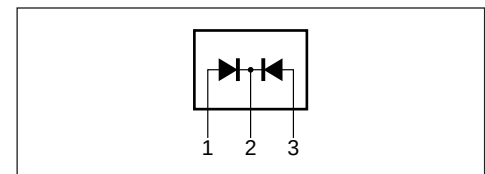
■ Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

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

* $t = 1\text{s}$



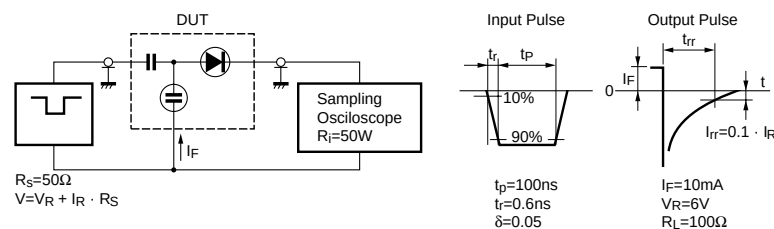
■ Internal Connection

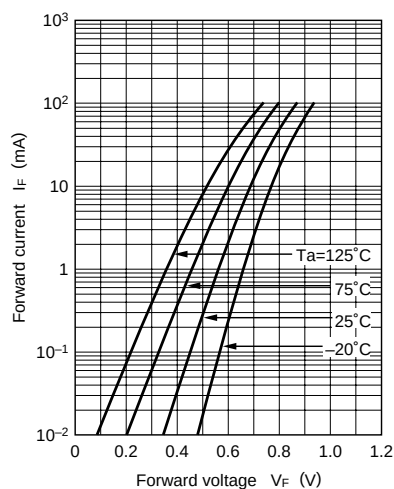
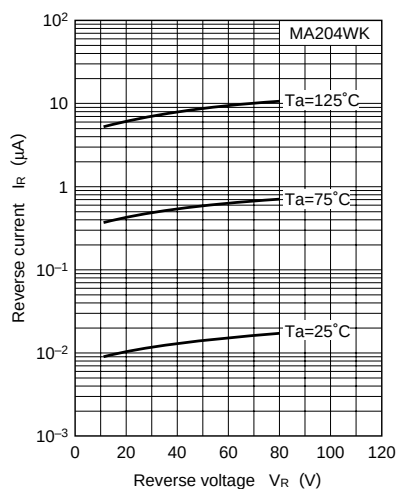
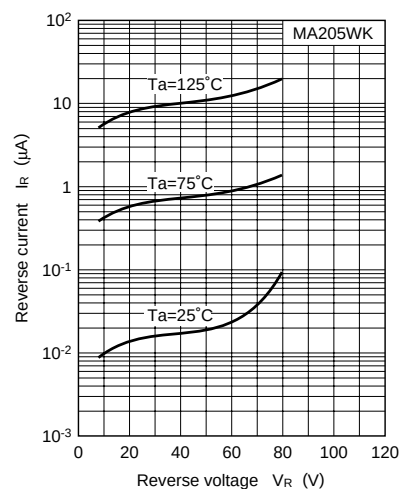
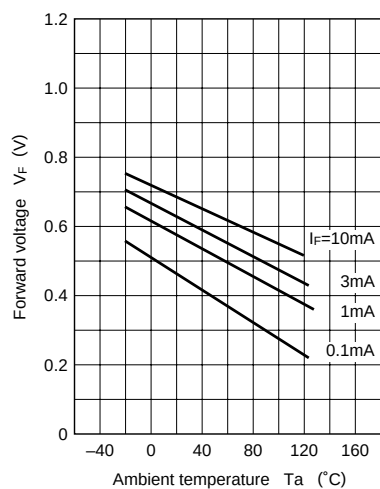
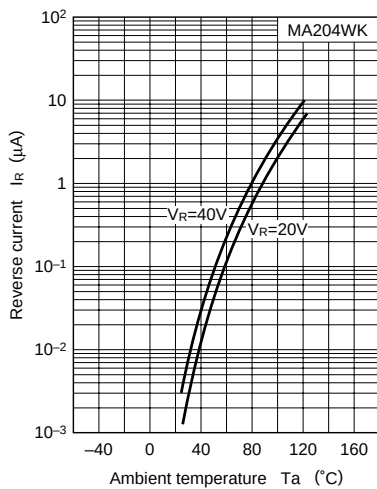
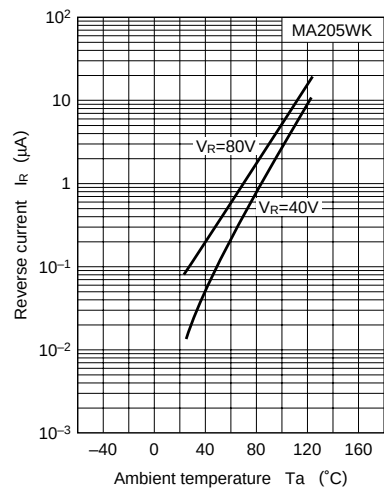


■ Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_R	$V_R = 35\text{V}$			0.1	μA
		$V_R = 75\text{V}$			0.1	
Forward voltage (DC)	V_F	$I_F = 100\text{mA}$			1.2	V
Reverse voltage (DC)	V_R	$I_R = 100\mu\text{A}$	40			V
			80			
Terminal capacitance	C_t	$V_R = 0\text{V}, f = 1\text{MHz}$			4	pF
Reverse recovery time	t_{rr}^*	$I_F = 10\text{mA}, V_R = 6\text{V}$ $I_{rr} = 0.1 \cdot I_R, R_L = 100\Omega$			3	ns

* t_{rr} measuring circuit



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