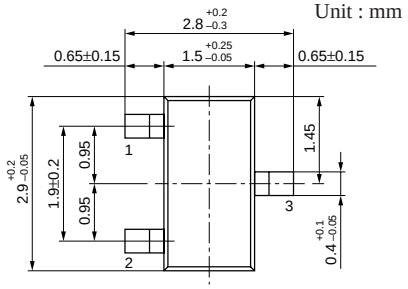
MA717WA, MA717WK

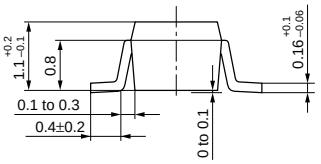
Silicon epitaxial planer type

For the switching circuit

■ Features

- Two elements are incorporated in MA717
- Low forward rise voltage V_F, optimum for low-voltage rectification (Low V_F type of MA704WA/WK)
- Fast reverse recovery time t_{rr}, optimum for high-frequency rectification





JEDEC : TO-236
EIAJ : SC-59
Mini Type Package (3-pin)

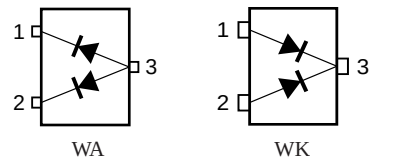
	MA717WA	MA717WK
1	Cathode	Anode
2	Cathode	Anode
3	Anode	Cathode

■ Absolute Maximum Ratings (Ta= 25˚C)

Parameter		Symbol	Rating	Unit
Reverse voltage (DC)		V_R	30	V
Peak reverse voltage		V_{RM}	30	V
Forward current (DC)	Single	I_F	30	mA
	Double		20*	
Peak forward current	Single	I_{FM}	150	mA
	Double		110*	
Junction temperature		T_j	125	˚C
Storage temperature		T_{stg}	– 55 to + 125	˚C

* Use value per chip

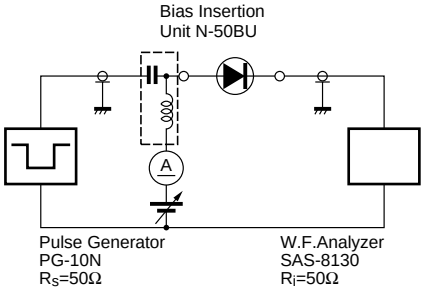
■ Internal Connection

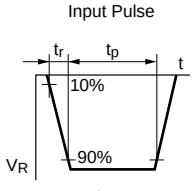


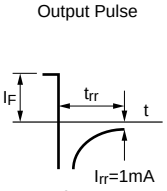
■ Electrical Characteristics (Ta= 25˚C)

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_R	V_R = 30V			30	μA
Forward voltage (DC)	V_{F1}	I_F =1mA			0.3	V
	V_{F2}	I_F = 30mA			1	V
Terminal capacitance	C_t	V_R =1V, f=1MHz		1.5		pF
Reverse recovery time	t_{rr}*	I_F = I_R=10mA I_{rr}=1mA, R_L=100Ω		1		ns
Detection efficiency	η	V_{in}= 3$V_{(peak)}$, f= 30MHz R_L= 3.9kΩ, C_L=10pF		65		%

Note 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on charge of a human body and leakage from the equipment used.
2. Rated input/output frequency : 2000MHz
3. * t_{rr} measuring circuit



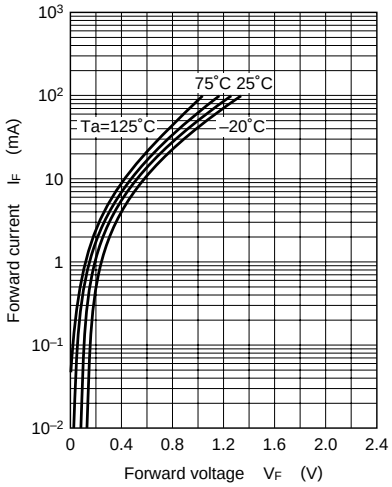




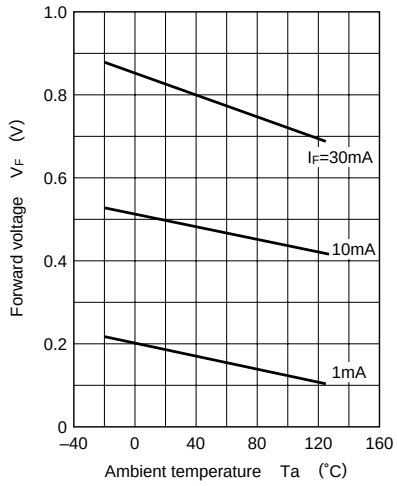
■ Marking

Part Number	MA717WA	MA717WK
Symbol	M3E	M3D

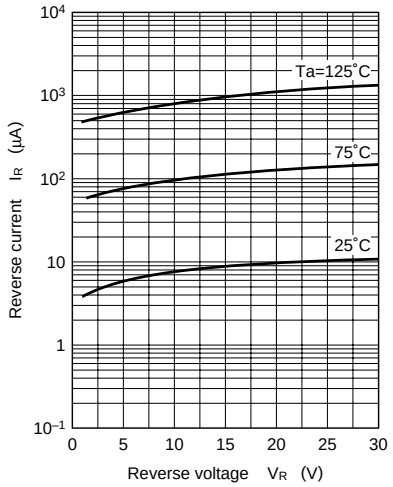
$I_F - V_F$



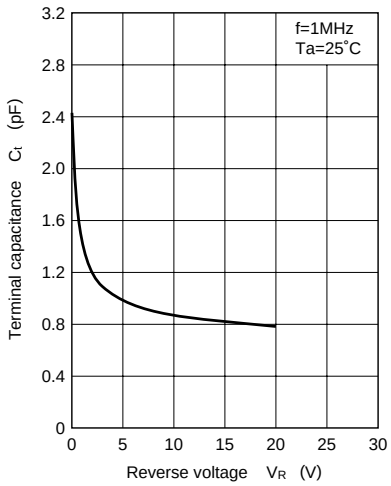
$V_F - Ta$



$I_R - V_R$



$C_t - V_R$



$I_R - Ta$