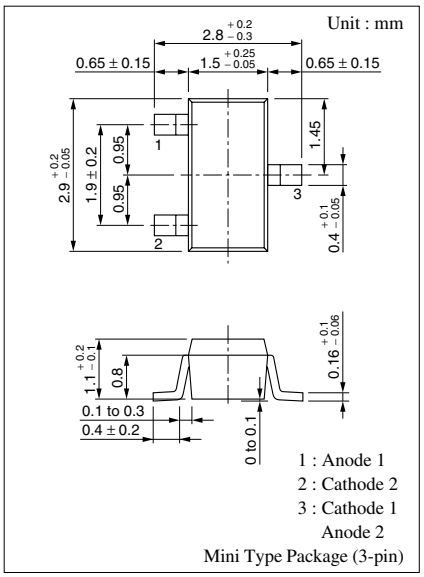
MA3X200F

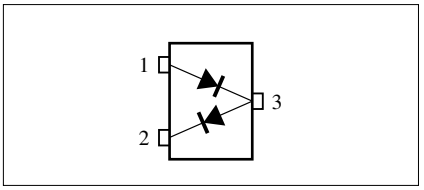
Silicon epitaxial planar type

For switching circuits



Marking Symbol: M5M

Internal Connection



■ Features

- Two elements contained in one package, allowing high-density mounting
- Soft recovery characteristic (T_{rr}: 100 ns)
- Small terminal capacitance, C_t

■ Absolute Maximum Ratings T_a = 25°C

Parameter		Symbol	Rating	Unit
Reverse voltage (DC)		V_R	80	V
Peak reverse voltage		V_{RM}	80	V
Forward voltage (DC)	Single	I_F	100	mA
	Series		75	
Peak forward current	Single	I_{FM}	225	mA
	Series		170	
Non-repetitive peak forward surge current*	Single	I_{FSM}	500	mA
	Series		325	
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	−55 to +150	°C

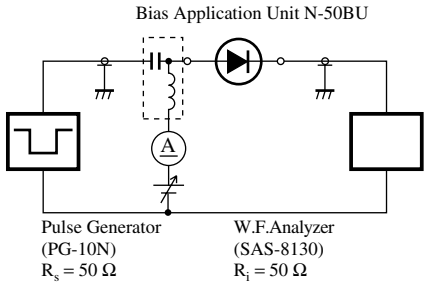
Note) * : t = 1 s

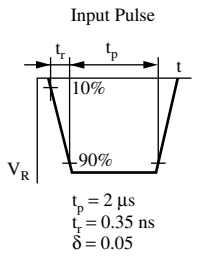
■ Electrical Characteristics T_a = 25°C

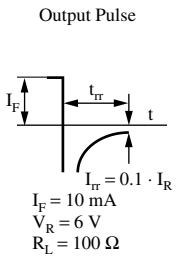
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_{R1}	V_R = 75 V			10	nA
	I_{R2}	V_R = 5 V, T_a = 85°C			20	nA
Forward voltage (DC)	V_F	I_F = 100 mA			1.2	V
Reverse voltage (DC)	V_R	I_R = 100 µA	80			V
Terminal capacitance	C_t	V_R = 0 V, f = 1 MHz			2.5	pF
Reverse recovery time*	t_{rr}	I_F = 10 mA, V_R = 6 V I_{rr} = 0.1 · I_R, R_L = 100 Ω			100	ns

Note) 1. Rated input/output frequency: 100 MHz

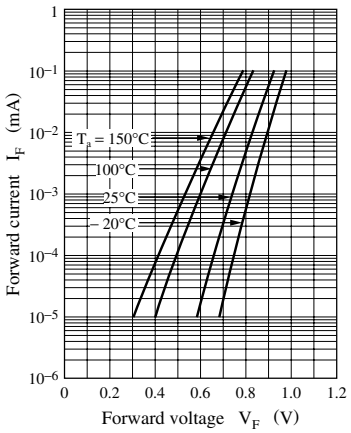
2. * : t_{rr} measuring circuit



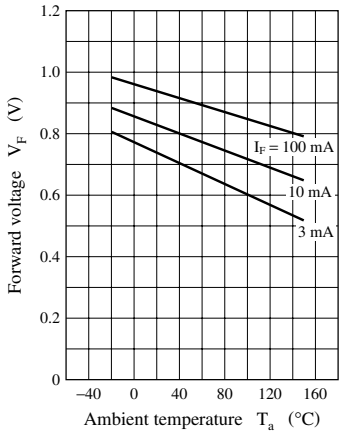




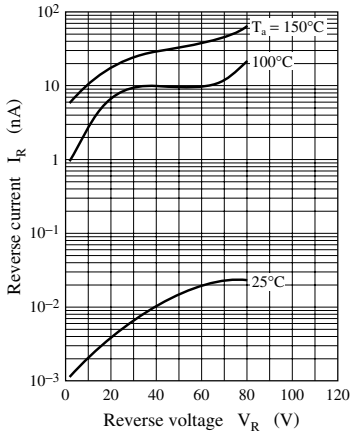
I_F — V_F



V_F — T_a



I_R — V_R



I_R — T_a