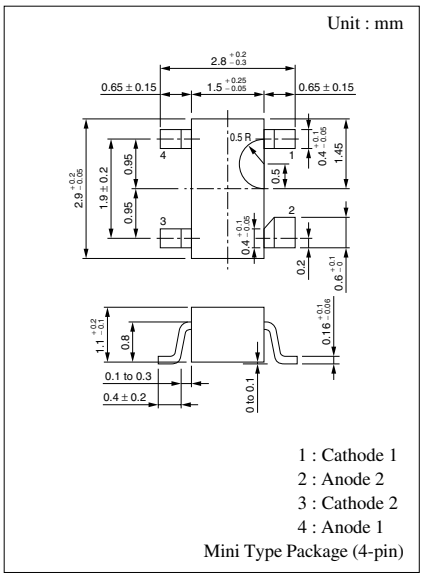
MA4X160A (MA160A)

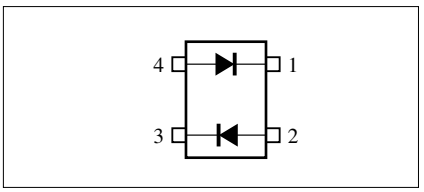
Silicon epitaxial planar type

For switching circuits



Marking Symbol: M1E

Internal Connection



■ Features

- Two isolated elements contained in one package, allowing high-density mounting
- Centrosymmetrical wiring, allowing to free from the taping direction
- Short reverse recovery time t_{rr}
- Small terminal capacitance, C_t

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter		Symbol	Rating	Unit
Reverse voltage (DC)		V_R	80	V
Repetitive peak reverse voltage		V_{RRM}	80	V
Reverse voltage (DC)	Single	$I_{F(AV)}$	100	mA
	Double	$I_{F(AV)}$	75	mA/Unit
Repetitive peak forward current	Single	I_{FRM}	225	mA
	Double	I_{FRM}	170	mA/Unit
Non-repetitive peak forward surge current*	Single	I_{FSM}	500	mA
	Double	I_{FSM}	375	mA/Unit
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	−55 to +150	°C

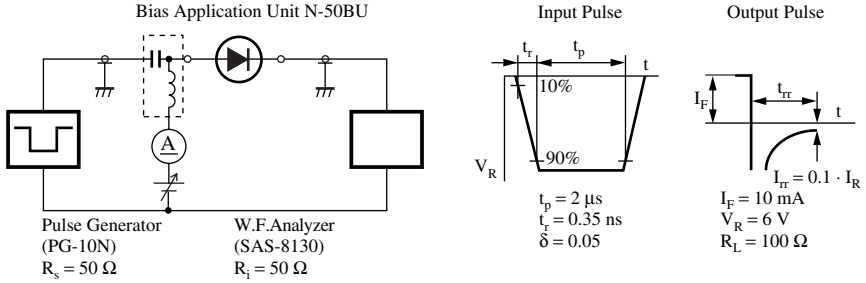
Note) * : t = 1 s

■ Electrical Characteristics $T_a = 25°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	V_R = 75 V			0.1	µA
Forward voltage (DC)	V_F	I_F = 100 mA		0.95	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		0.9	2	pF
Reverse recovery time*	t_{rr}	I_F = 10 mA, V_R = 6 V I_{rr} = 0.1 · I_R, R_L = 100 Ω			3	ns

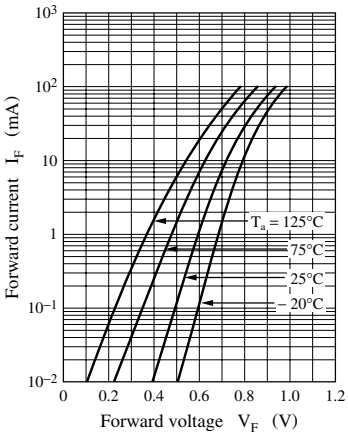
Note) 1. Rated input/output frequency: 100 MHz

2. * : t_{rr} measuring circuit

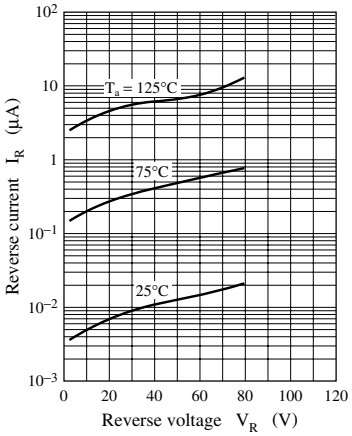


Note) The part number in the parenthesis shows conventional part number.

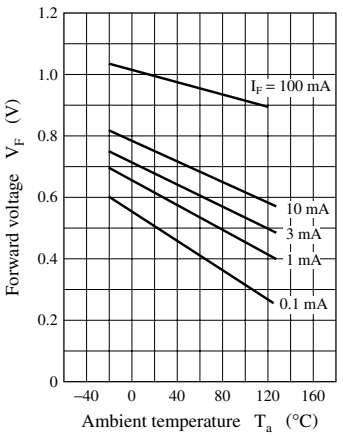
I_F — V_F



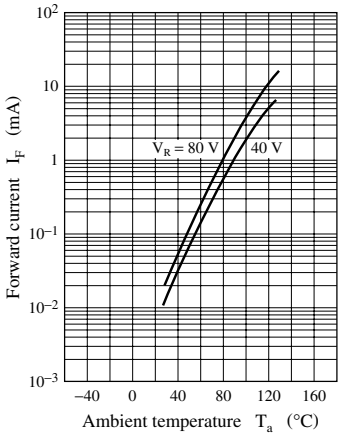
I_R — V_R



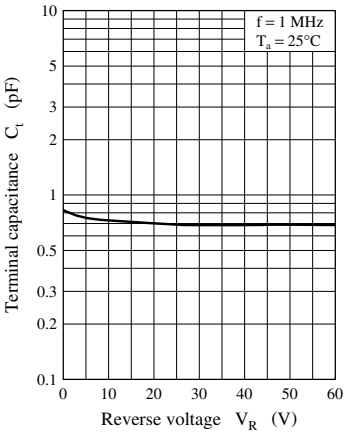
V_F — T_a



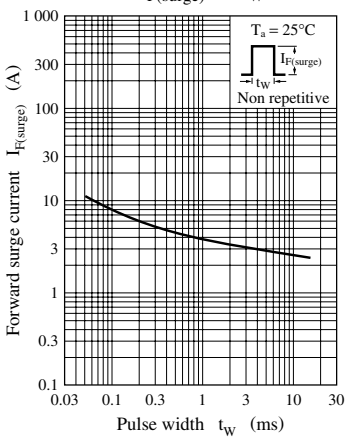
I_F — T_a



C_t — V_R



$I_{F(surge)}$ — t_W



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