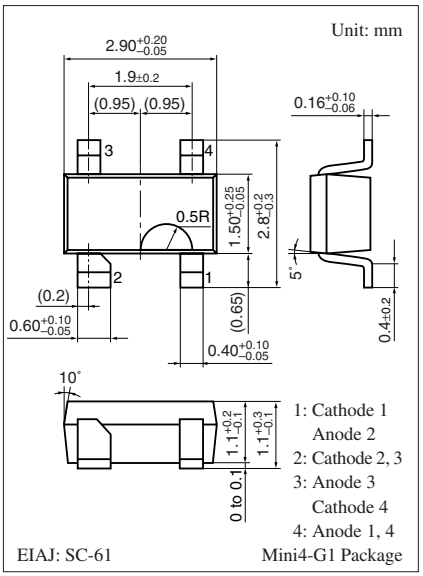
MA4X193 (MA193)

Silicon epitaxial planar type

For switching circuit

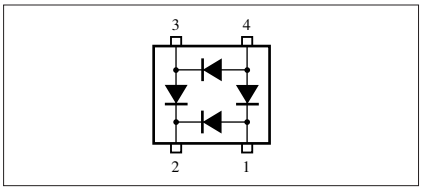
■ Features

- Four isolated elements contained in one package
- Short reverse recovery time t_{rr}
- Bridge diodes for surface mounting
- Anode common + cathode common composite product



Marking Symbol: M2Z

Internal Connection



■ Absolute Maximum Ratings $T_a = 25°C$

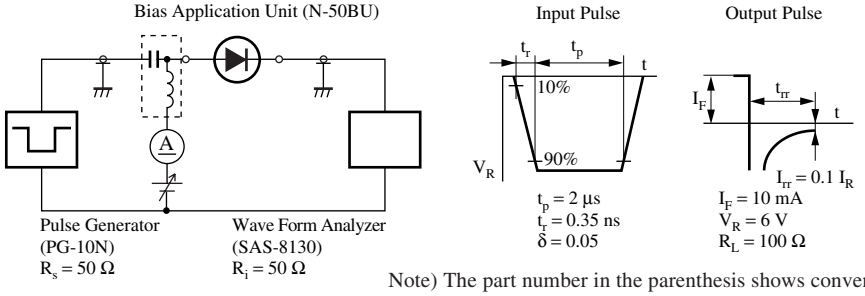
Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	80	V
Repetitive peak reverse voltage	V_{RRM}	80	V
Forward current (Average)	$I_{F(AV)}$	70	mA
Repetitive peak forward current	I_{FRM}	150	mA
Non-repetitive peak forward surge current *	I_{FSM}	250	mA
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

Note) *: t = 1 s

■ Electrical Characteristics $T_a = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	I_F = 70 mA			1.2	V
Reverse voltage	V_R	I_R = 100 µA	80			V
Reverse current	I_R	V_R = 75 V			100	nA
Terminal capacitance	C_t	V_R = 0 V, f = 1 MHz			15	pF
Reverse recovery time *	t_{rr}	I_F = 10 mA, V_R = 6 V I_{rr} = 0.1 I_R, R_L = 100 Ω			10	ns

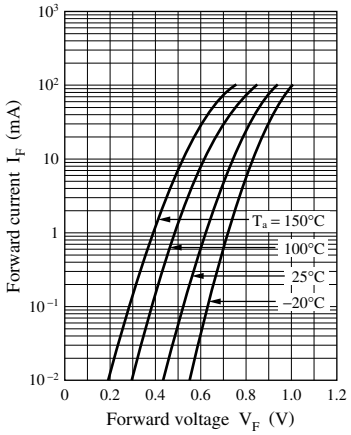
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. Absolute frequency of input and output is 100 MHz.
3. *: t_{rr} measurement circuit



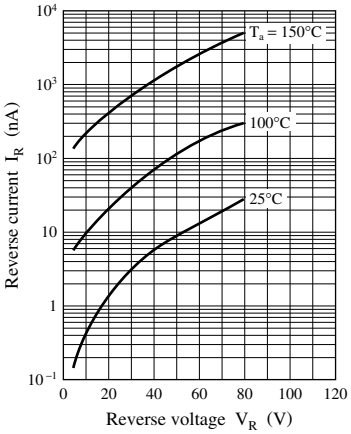
Note) The part number in the parenthesis shows conventional part number.

4-1 and 4-3 pins (anode common) characteristics charts

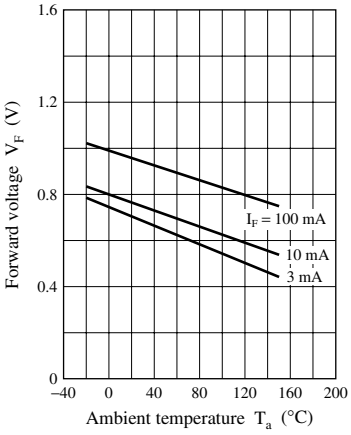
I_F — V_F



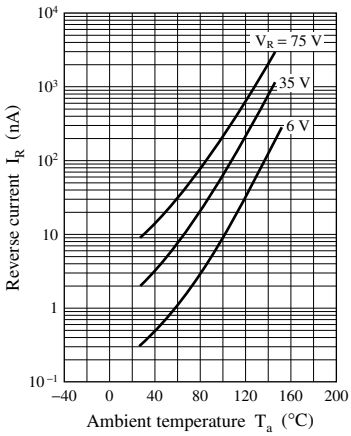
I_R — V_R



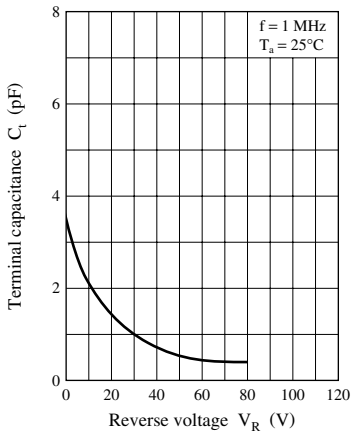
V_F — T_a



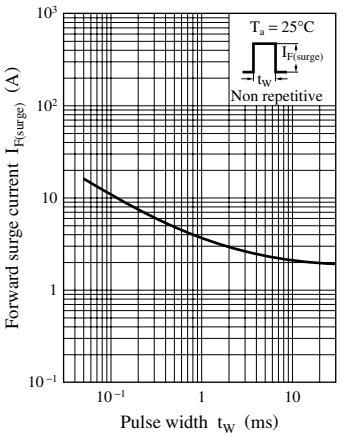
I_R — T_a



C_t — V_R

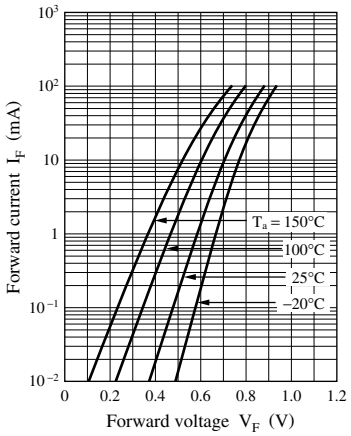


$I_{F(surge)}$ — t_W

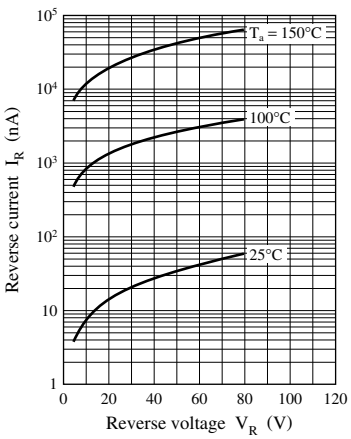


1-2 and 3-2 pins (cathode common) characteristics charts

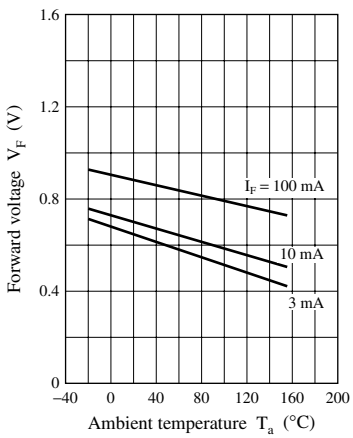
I_F — V_F



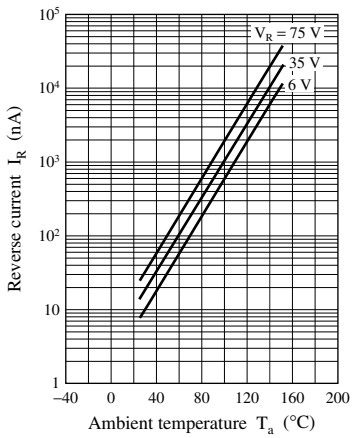
I_R — V_R



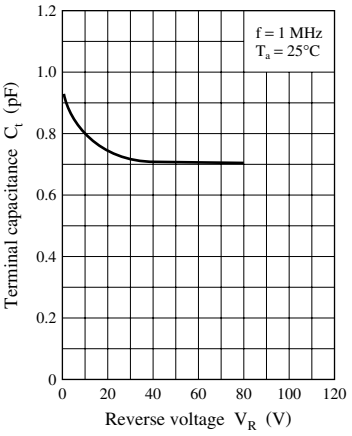
V_F — T_a



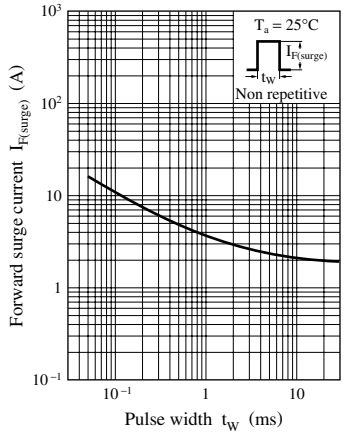
I_R — T_a



C_t — V_R



$I_{F(surge)}$ — t_W



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