



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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MA3X701 (MA10701)

Silicon epitaxial planar type

For high frequency rectification

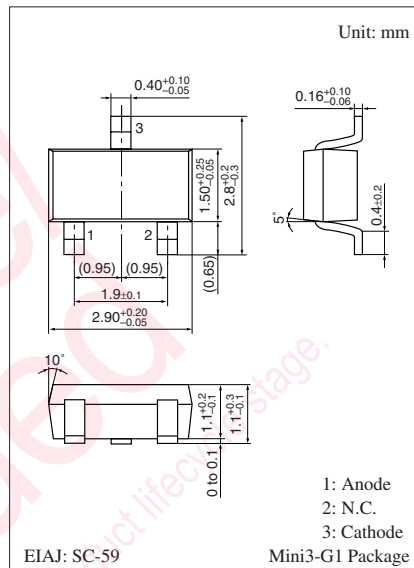
■ Features

- Forward current (Average) $I_{F(AV)} = 700$ mA rectification is possible

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

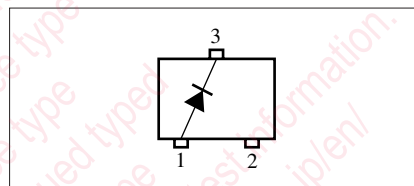
Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	30	V
Repetitive peak reverse voltage	V_{RRM}	30	V
Forward current (Average)	$I_{F(AV)}$	700	mA
Non-repetitive peak forward surge current *	I_{FSM}	5	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Note) *: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)



Marking Symbol: M4P

Internal Connection



■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_Z = 700$ mA			0.55	V
Reverse current	I_R	$V_R = 30$ V			80	μA
Terminal capacitance	C_t	$V_R = 0$ V, $f = 1$ MHz		120		pF
Reverse recovery time *2	t_{rr}	$I_F = I_R = 100$ mA $I_{rr} = 10$ mA, $R_L = 100$ Ω		7.5		ns
Thermal resistance (j-a)	$R_{th(j-a)1}$			420		$^\circ\text{C}/\text{W}$
	$R_{th(j-a)2}$ *1			330		$^\circ\text{C}/\text{W}$

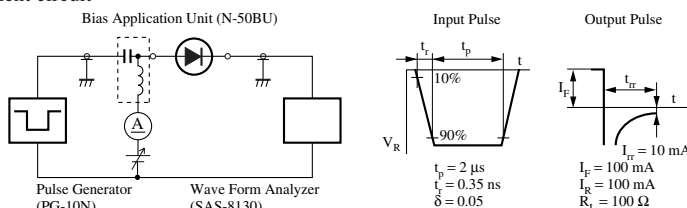
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

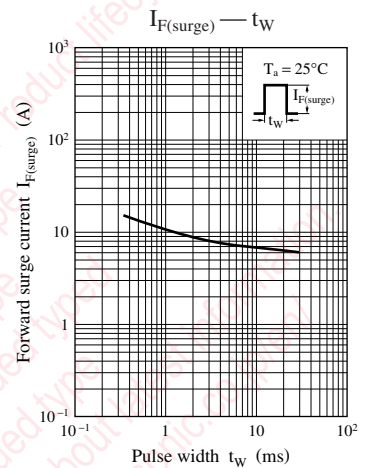
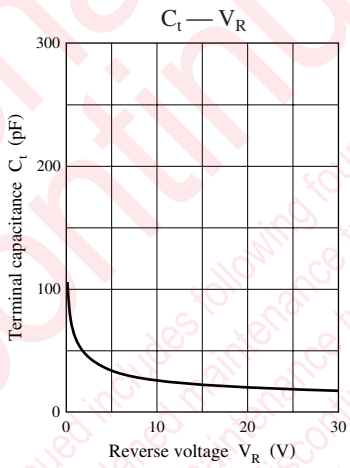
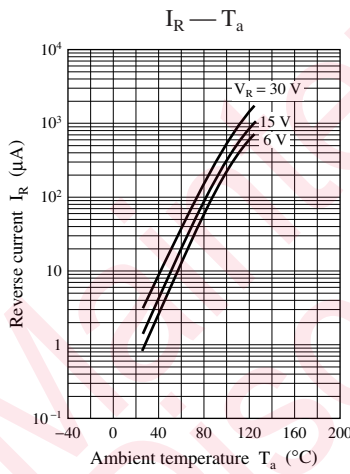
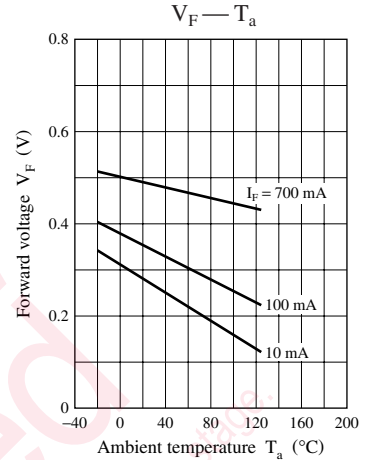
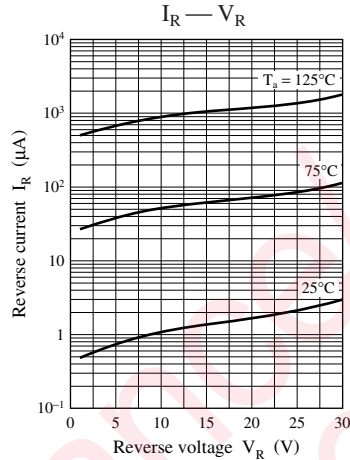
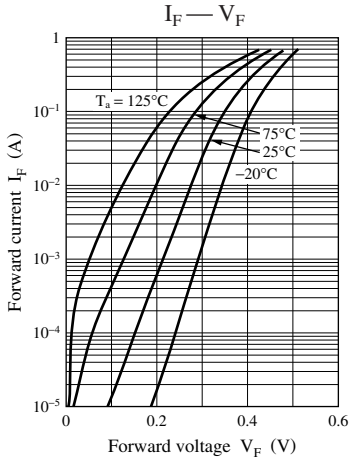
3. Absolute frequency of input and output is 400 MHz.

4. *1: Guaranteed on the condition of soldered to PC board. (Cu foil 0.8 mm \times 20 mm)

*2: t_{rr} measurement circuit



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



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