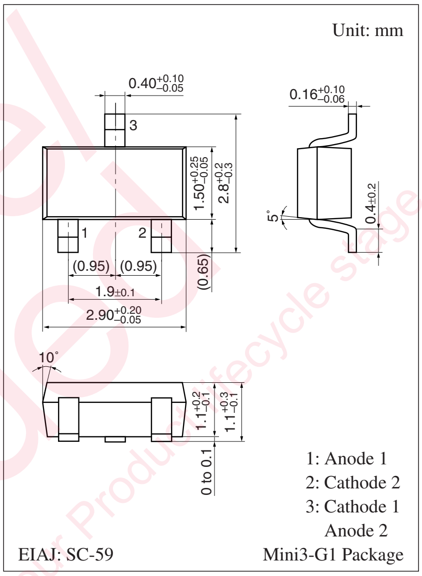
MA3X740 (MA740)

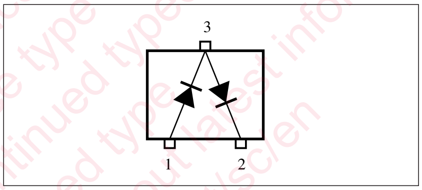
Silicon epitaxial planar type

For super high speed switching
For small current rectification



Marking Symbol: M3C

Internal Connection



■ Features

- Two MA3X721 (MA721) is contained in one package (series connection)
- Forward current (Average) $I_{F(AV)} = 200$ mA (per single diode) rectification is possible

■ Absolute Maximum Ratings $T_a = 25°C$

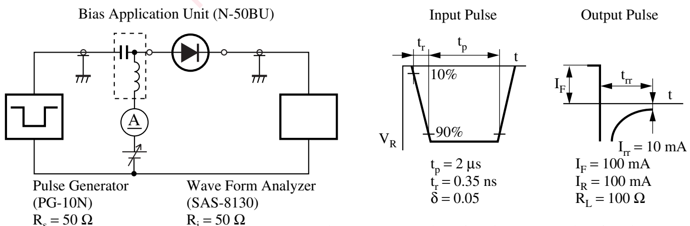
Parameter		Symbol	Rating	Unit
Reverse voltage		V_R	30	V
Repetitive peak reverse voltage		V_{RRM}	30	V
Forward current (Average)	Single	$I_{F(AV)}$	200	mA
	Series		130	
Peak forward current	Single	I_{FM}	300	mA
	Series		220	
Non-repetitive peak forward surge current *	Single	I_{FSM}	1.0	A
	Series		0.7	
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	−55 to +150	°C

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

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

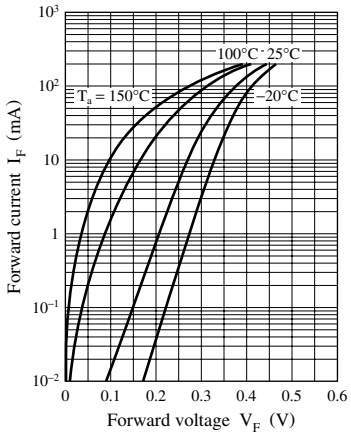
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 200$ mA			0.55	V
Reverse current	I_R	$V_R = 30$ V			50	µA
Terminal capacitance	C_t	$V_R = 0$ V, f = 1 MHz		30		pF
Reverse recovery time *	t_{rr}	$I_F = I_R = 100$ mA $I_{rr} = 10$ mA, $R_L = 100\ \Omega$		3.0		ns

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 1 GHz.
4. *: t_{rr} measurement circuit

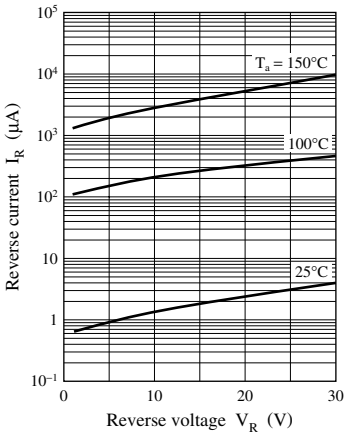


Note) The part number in the parenthesis shows conventional part number.

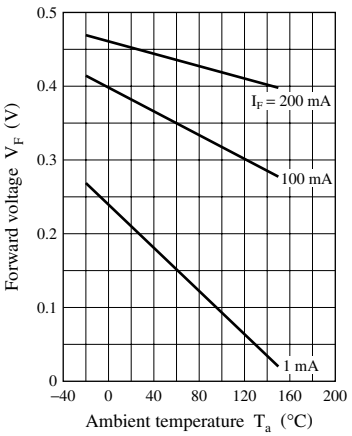
I_F — V_F



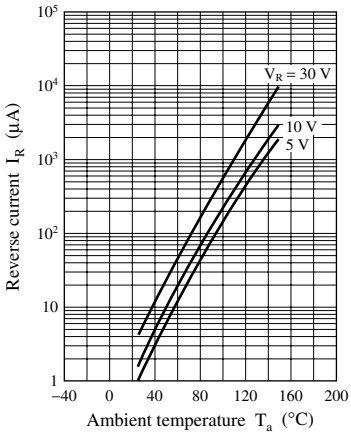
I_R — V_R



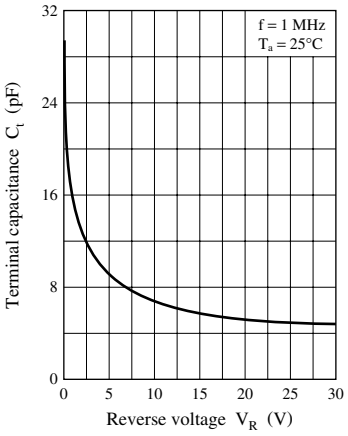
V_F — T_a



I_R — T_a



C_t — V_R



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