

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number: MA3X152K0L

Manufacturer: Panasonic Electronic Components

Package: TO-236-3, SC-59, SOT-23-3

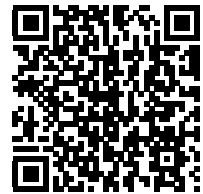
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/panasonic-electronic-components/ma3x152k0l.html>

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Contact Information

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Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

MA3X152A (MA152A), MA3X152K (MA152K)

Silicon epitaxial planar type

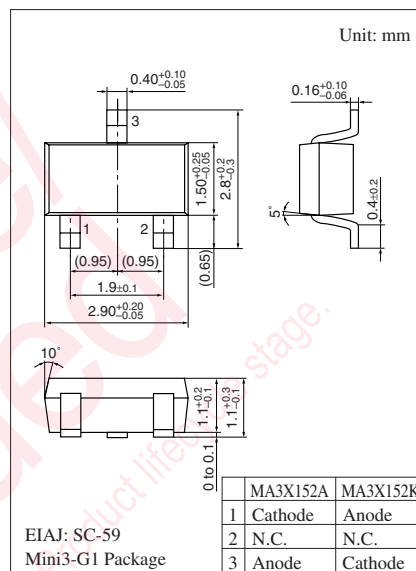
For high-speed switching circuits

■ Features

- Short reverse recovery time t_{rr}
- Small terminal capacitance C_t

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

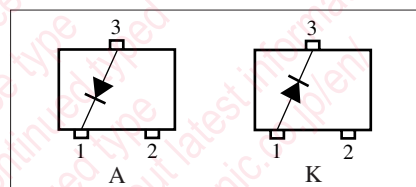
Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	80	V
Maximum peak reverse voltage	V_{RM}	80	V
Forward current	I_F	100	mA
Peak forward current	I_{FM}	225	mA
Non-repetitive peak forward surge current *	I_{FSM}	500	mA
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Note) *: $t = 1$ s

Marking Symbol

- MA3X152A: MB
- MA3X152K: MI

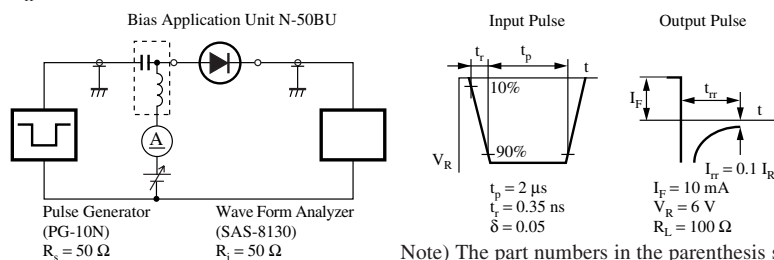
Internal Connection

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 100$ mA			1.2	V
	MA3X152A					
	MA3X152K				1.2	
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			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

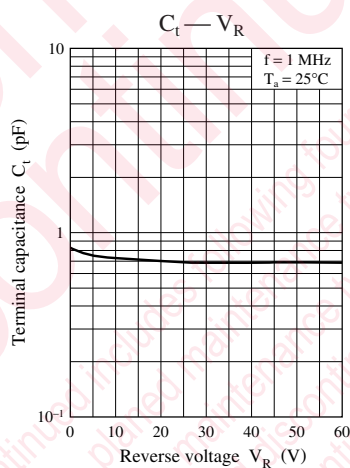
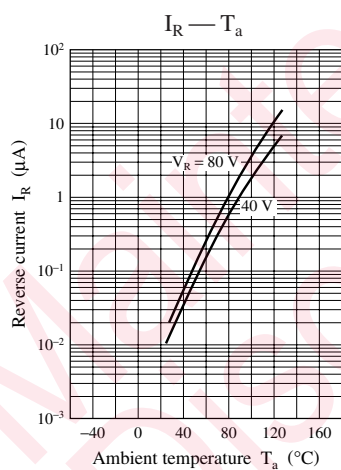
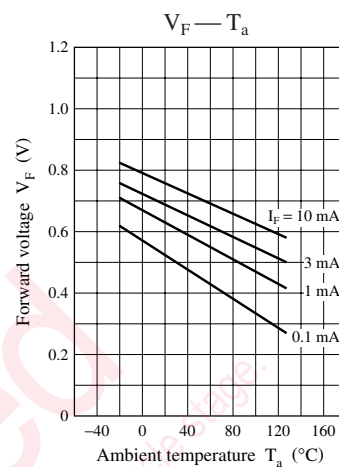
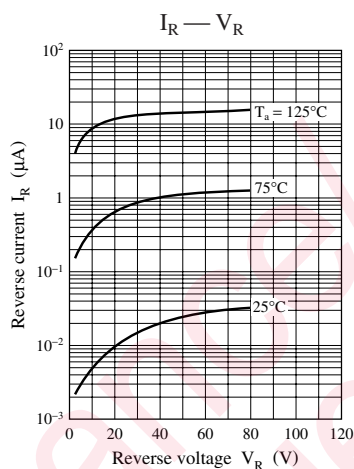
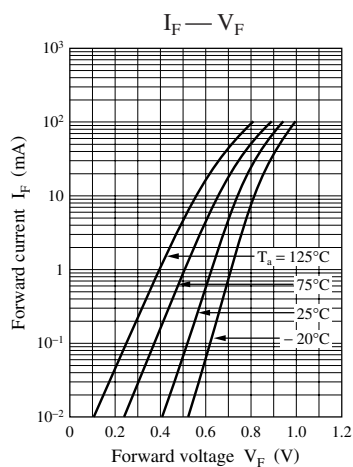
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring method for diodes.

2. Absolute frequency of input and output is 100 MHz.

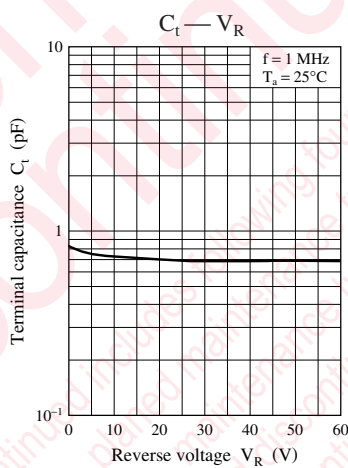
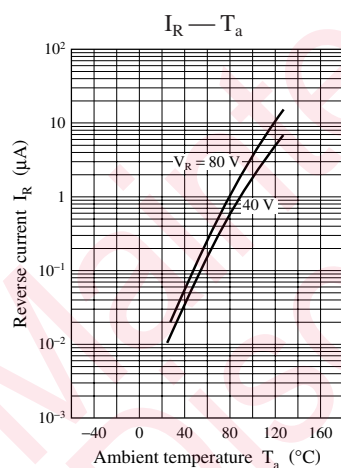
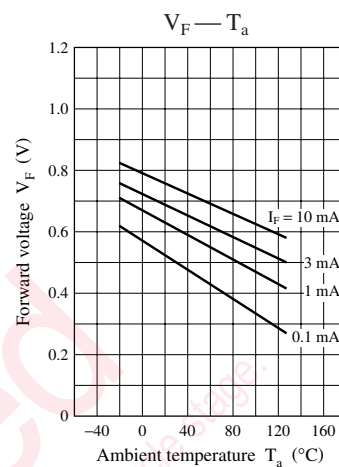
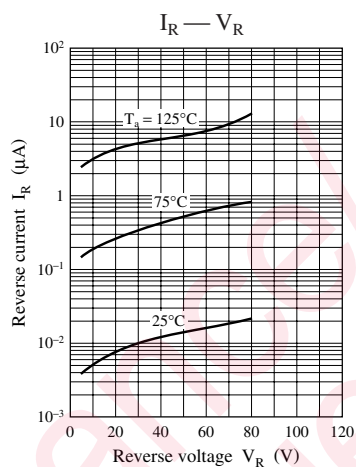
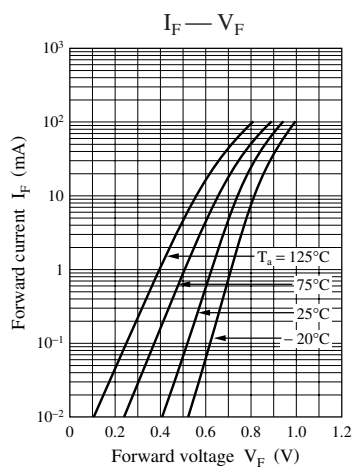
3. *: t_{rr} measurement circuit

Note) The part numbers in the parenthesis show conventional part number.

Characteristics chart of MA3X152A



Characteristics chart of MA3X152K



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