# MA3X152A (MA152A), MA3X152K (MA152K)

## Silicon epitaxial planar type

For high-speed switching circuits

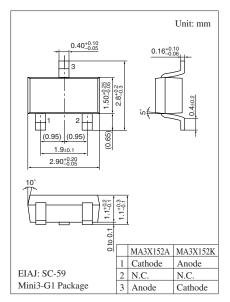
#### ■ Features

- Short reverse recovery time t<sub>rr</sub>
- Small terminal capacitance C<sub>t</sub>

## ■ Absolute Maximum Ratings $T_a = 25$ °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	Tj	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

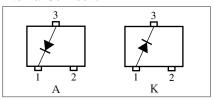
Note) \*: t = 1 s



#### Marking Symbol

MA3X152A: MB
 MA3X152K: MI

#### Internal Connection

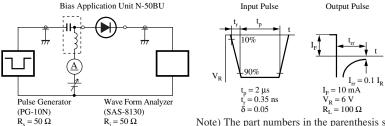


### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

Parameter		Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	MA3X152A	$V_{\mathrm{F}}$	$I_F = 100 \text{ mA}$			1.2	V
	MA3X152K					1.2	
Reverse voltage		$V_R$	$I_R = 100 \mu A$	80			V
Reverse current		$I_R$	$V_R = 75 \text{ V}$			100	nA
Terminal capacitance		C <sub>t</sub>	$V_R = 0 V, f = 1 MHz$			2	pF
Reverse recovery time *		t <sub>rr</sub>	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$			3	ns
			$I_{rr} = 0.1 I_R$ , $R_L = 100 \Omega$				

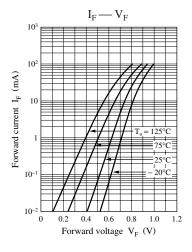
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring method for diodes.

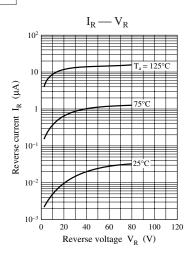
- 2. Absolute frequency of input and output is 100 MHz.
- 3. \*: t<sub>rr</sub> measurement circuit

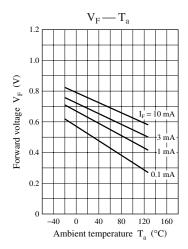


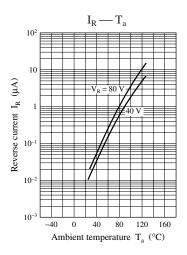
Note) The part numbers in the parenthesis show conventional part number.

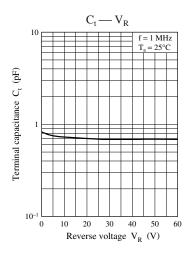
#### Characteristics chart of MA3X152A





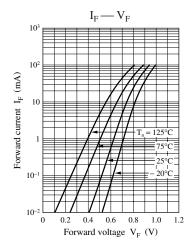


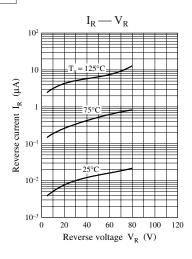


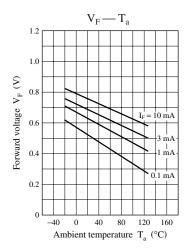


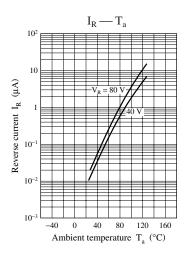
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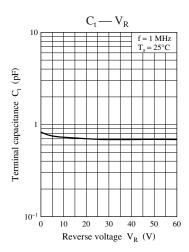
#### Characteristics chart of MA3X152K











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