

# MA3X152A (MA152A), MA3X152K (MA152K)

Silicon epitaxial planar type

For high-speed switching circuits

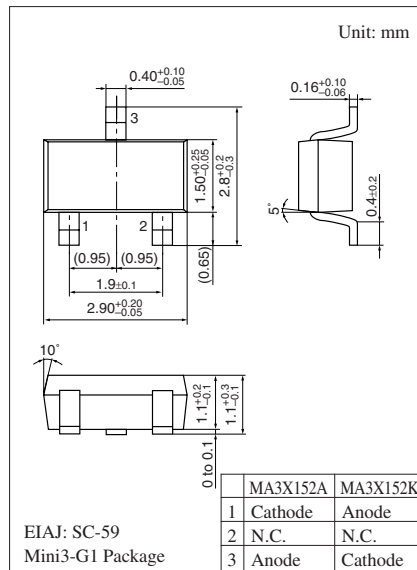
■ Features

- 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	$^\circ\text{C}$

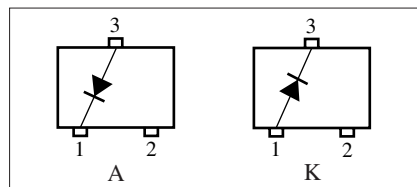
Note) \*:  $t = 1\text{ s}$



Marking Symbol

- MA3X152A: MB
- MA3X152K: MI

Internal Connection



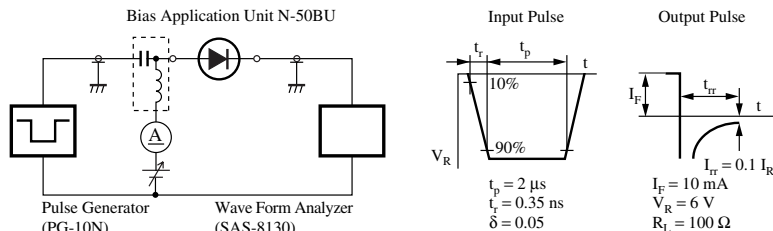
■ Electrical Characteristics  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	MA3X152A	$I_F = 100\text{ mA}$			1.2	V
	MA3X152K				1.2	
Reverse voltage	$V_R$	$I_R = 100\ \mu\text{A}$	80			V
Reverse current	$I_R$	$V_R = 75\text{ V}$			100	nA
Terminal capacitance	$C_t$	$V_R = 0\text{ V}, f = 1\text{ MHz}$			2	pF
Reverse recovery time *	$t_{rr}$	$I_F = 10\text{ mA}, V_R = 6\text{ V}$ $I_{rr} = 0.1 I_R, R_L = 100\ \Omega$			3	ns

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

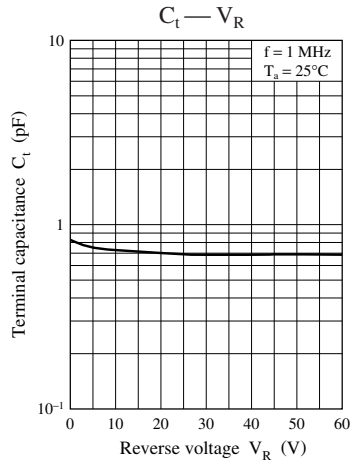
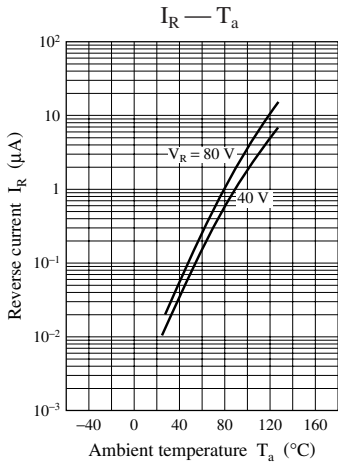
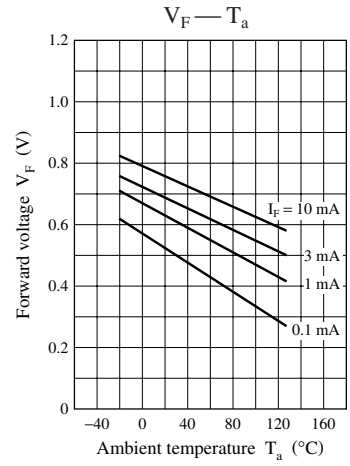
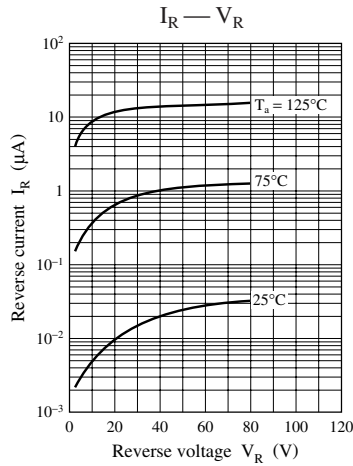
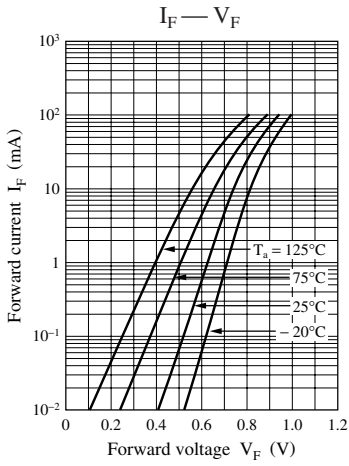
2. Absolute frequency of input and output is 100 MHz.

3. \*:  $t_{rr}$  measurement circuit

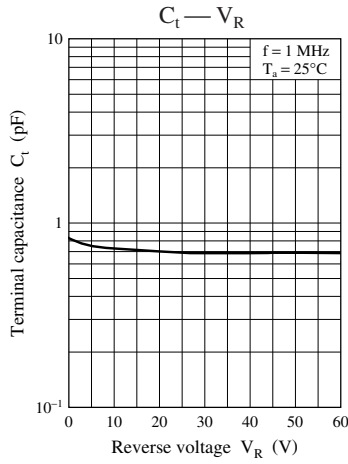
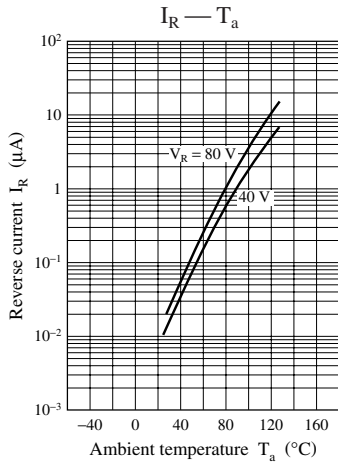
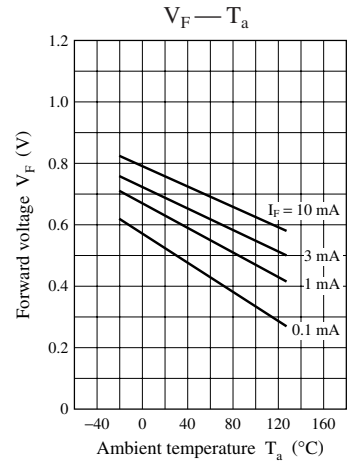
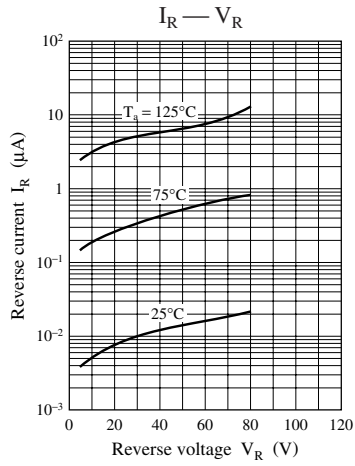
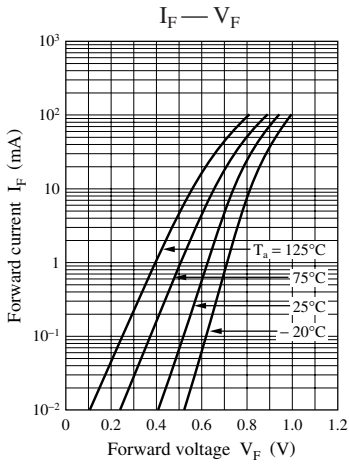


Note) The part numbers in the parenthesis show conventional part number.

Characteristics chart of MA3X152A



Characteristics chart of MA3X152K



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