

# MA3X152D (MA152WA), MA3X152E (MA152WK)

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	Single	$I_F$	100
	Double		150
Peak forward current	Single	$I_{FM}$	225
	Double		340
Non-repetitive peak forward surge current *	Single	$I_{FSM}$	500
	Double		750
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

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

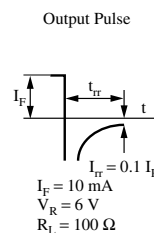
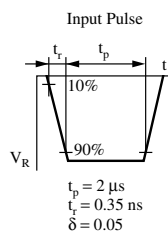
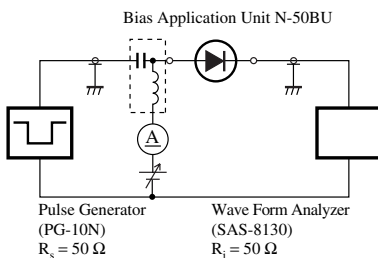
■ Electrical Characteristics  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 100 \text{ mA}$			1.2	V
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	MA3X152D	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$			15	pF
	MA3X152E				2	
Reverse recovery time *	MA3X152D	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$ $I_{rr} = 0.1 I_R, R_L = 100 \Omega$			10	ns
	MA3X152E				3	

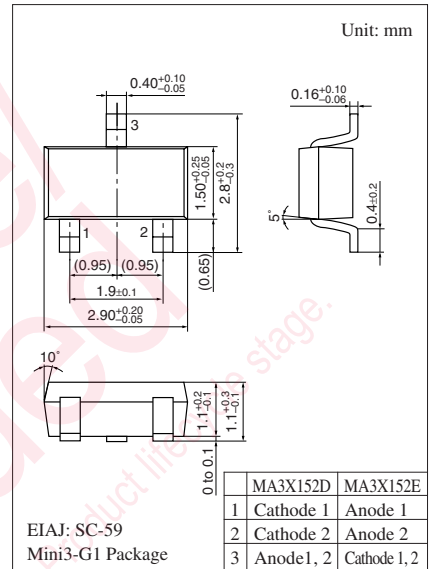
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring method for diodes.

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

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



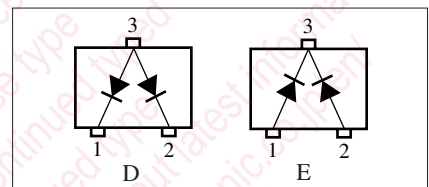
Note) The part numbers in the parenthesis show conventional part number.



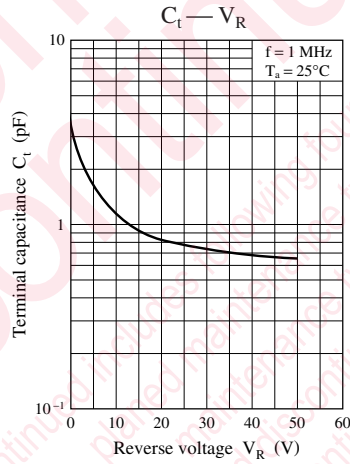
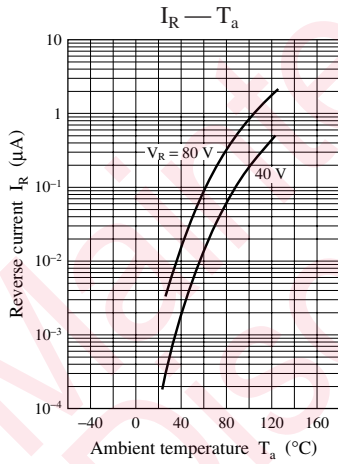
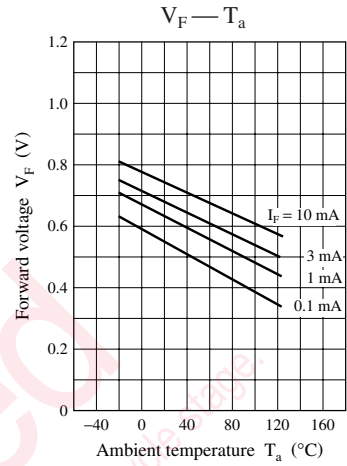
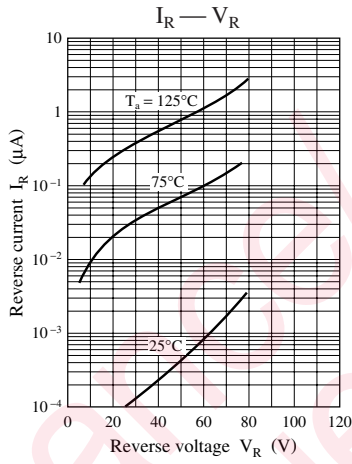
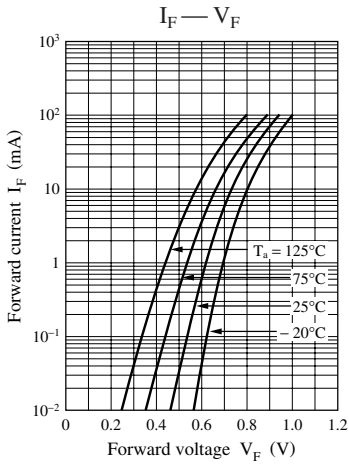
Marking Symbol

- MA3X152D: MO
- MA3X152E: MU

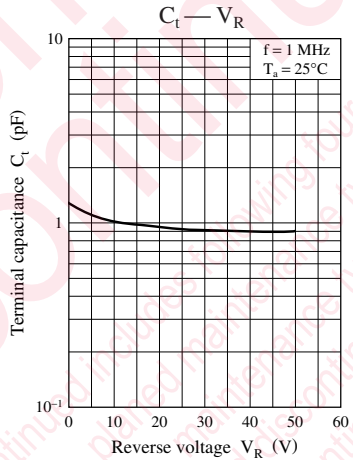
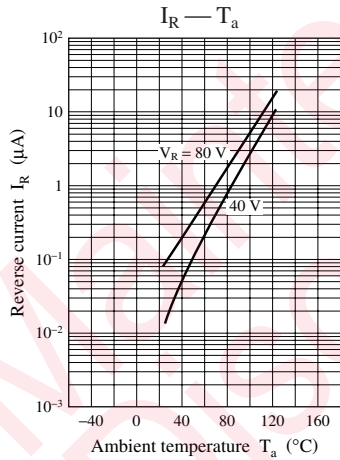
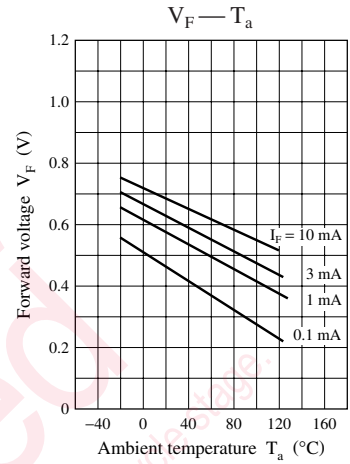
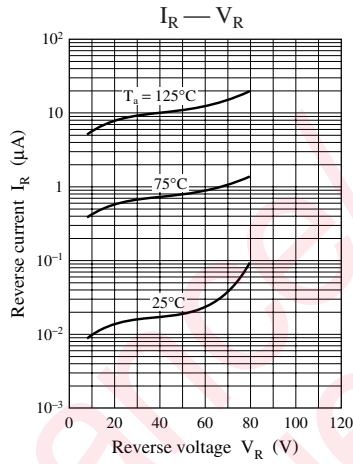
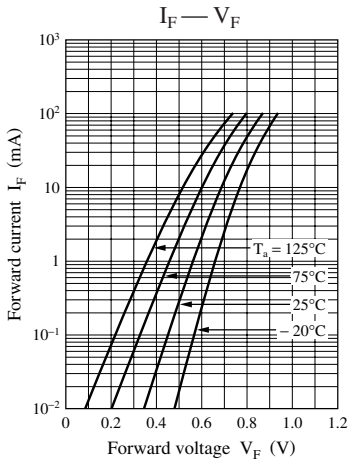
Internal Connection



Characteristics chart of MA3X152D



Characteristics chart of MA3X152E



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