

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

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

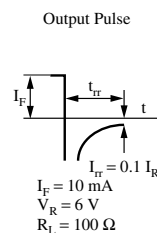
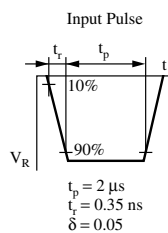
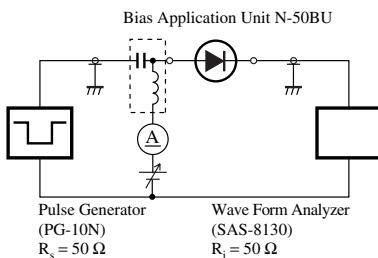
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

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	$C_t$	$V_R = 0\text{ V}, f = 1\text{ MHz}$			15	pF
	MA3X152E					2	
Reverse recovery time *	MA3X152D	$t_{rr}$	$I_F = 10\text{ mA}, V_R = 6\text{ V}$			10	ns
	MA3X152E		$I_{rr} = 0.1 I_R, R_L = 100\ \Omega$			3	

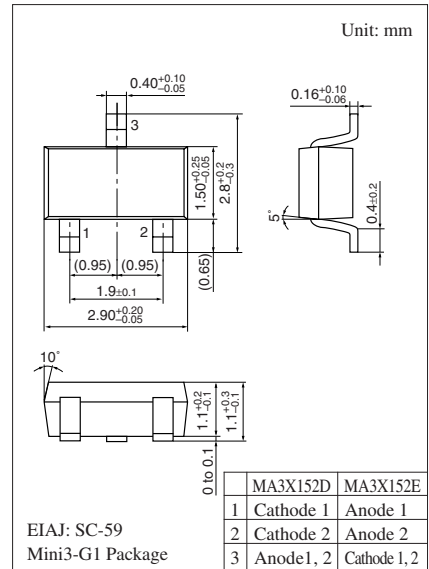
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring method for diodes.

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

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



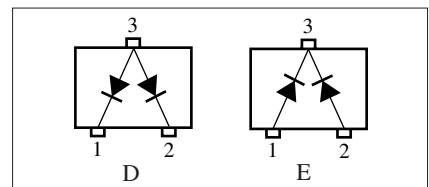
Note) The part numbers in the parenthesis show conventional part number.



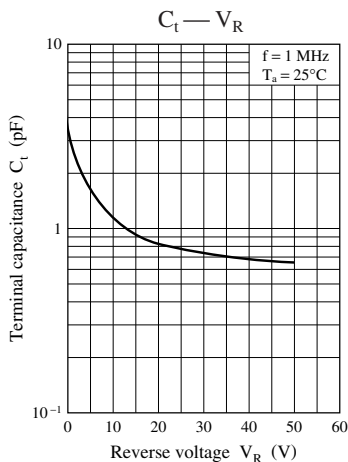
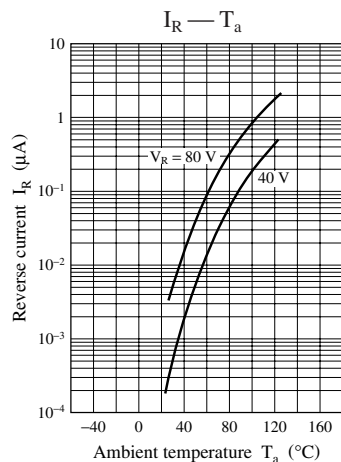
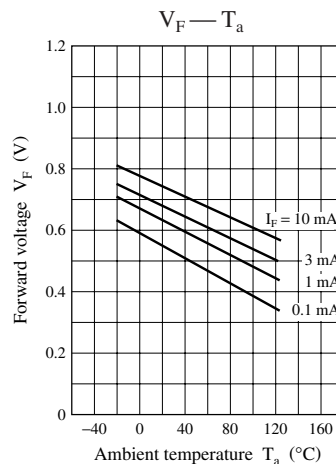
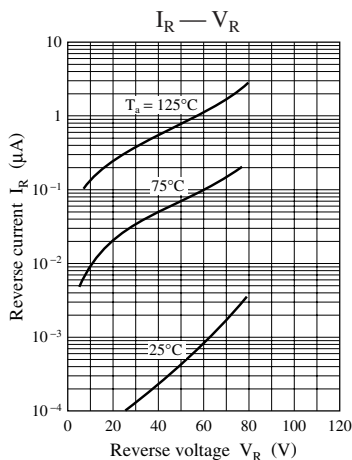
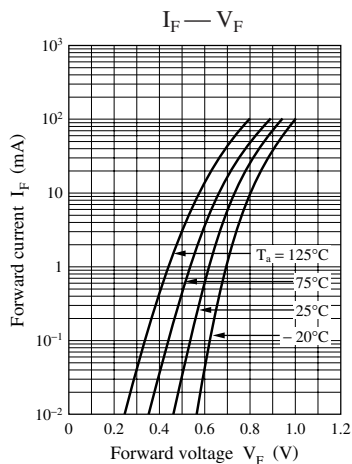
### Marking Symbol

- MA3X152D: MO
- MA3X152E: MU

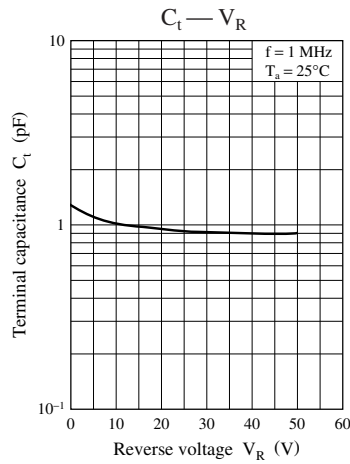
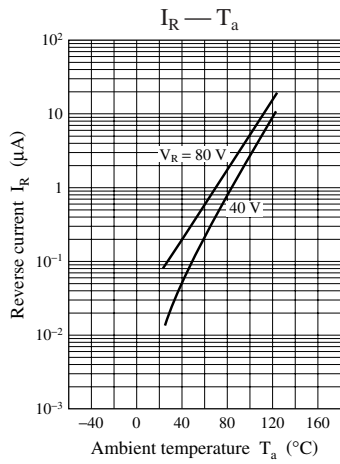
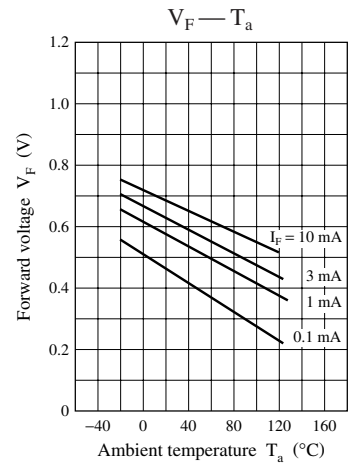
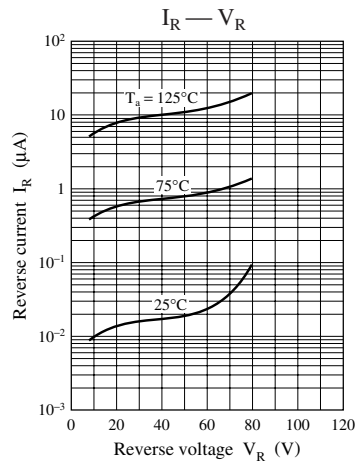
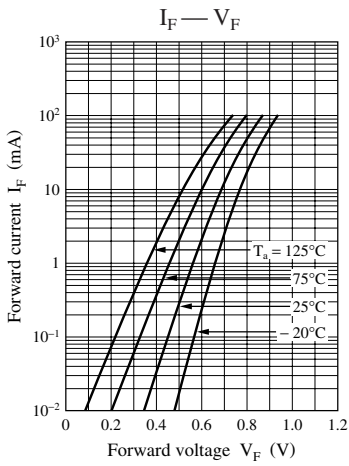
### Internal Connection



Characteristics chart of MA3X152D



Characteristics chart of MA3X152E



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