

MA3J142D (MA142WA), MA3J142E (MA142WK)

Silicon epitaxial planar type

For switching circuits

■ Features

- Two isolated elements contained in one package, allowing high-density mounting

■ 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) *: $t = 1\text{ s}$

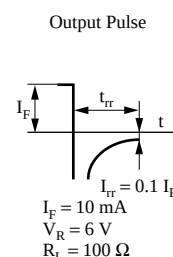
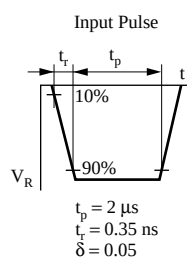
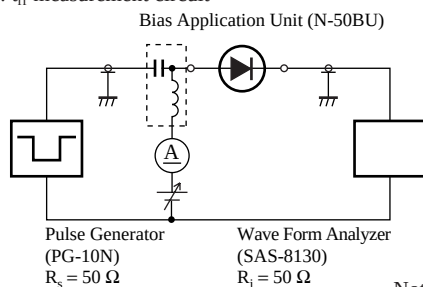
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage		V_F	$I_F = 100\text{ mA}$			1.2	V
Reverse voltage		V_R	$I_R = 100\text{ }\mu\text{A}$	80			V
Reverse current		I_R	$V_R = 75\text{ V}$			100	nA
Terminal capacitance	MA3J142D	C_t	$V_R = 0\text{ V}, f = 1\text{ MHz}$			15	pF
	MA3J142E					2	
Reverse recovery time *	MA3J142D	t_{rr}	$I_F = 10\text{ mA}, V_R = 6\text{ V}$			10	ns
	MA3J142E		$I_{rr} = 0.1 I_R, R_L = 100\text{ }\Omega$			3	

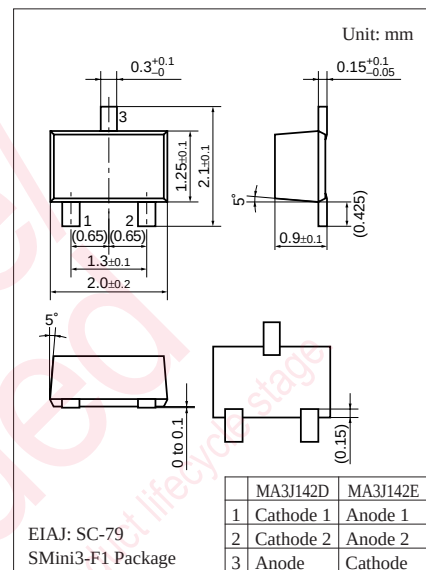
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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

3. *: t_{rr} measurement circuit



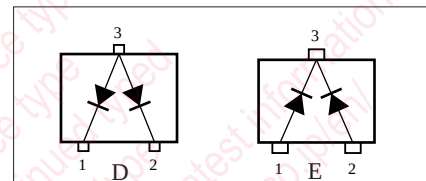
Note) The part numbers in the parenthesis show conventional part number.



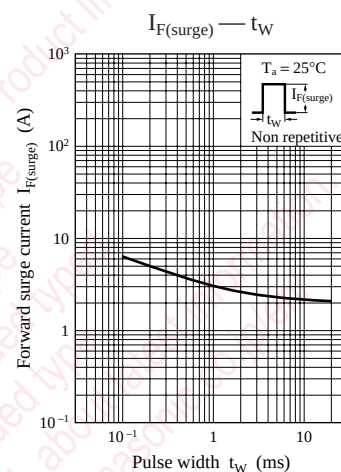
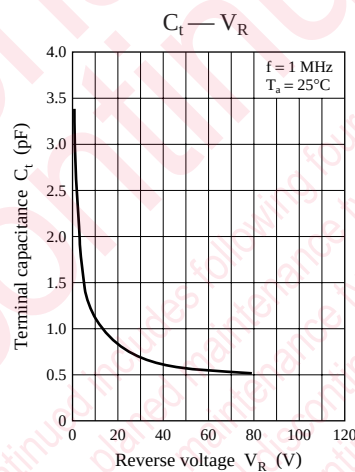
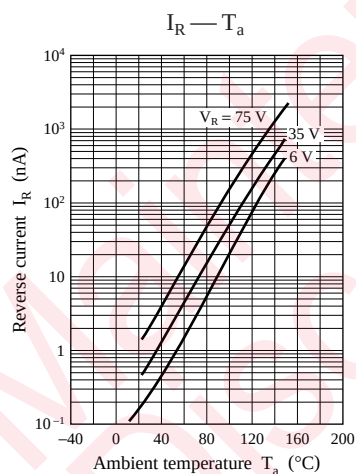
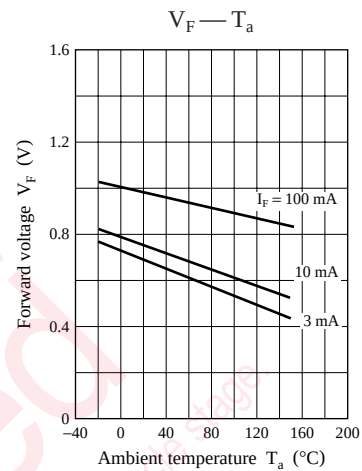
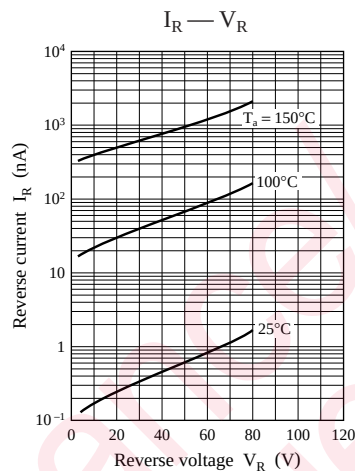
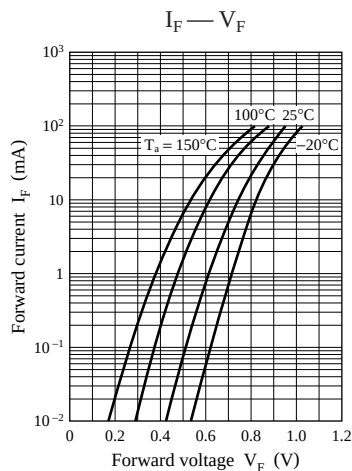
Marking Symbol:

- MA3J142D: MO
- MA3J142E: MU

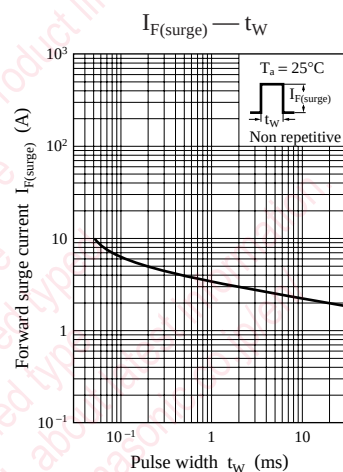
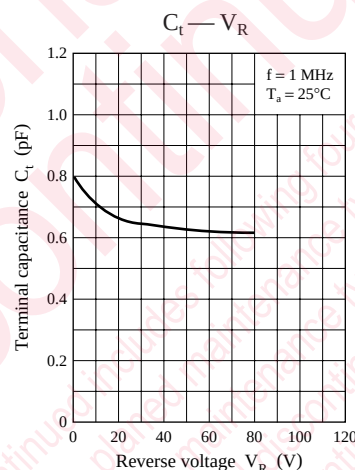
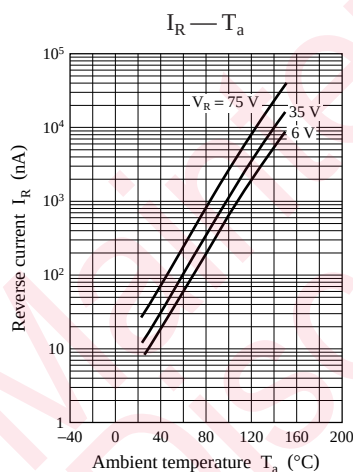
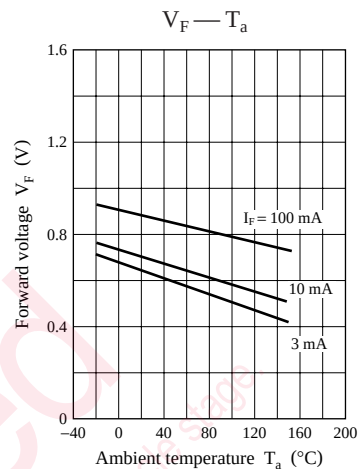
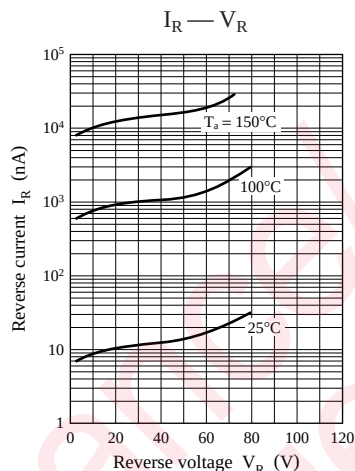
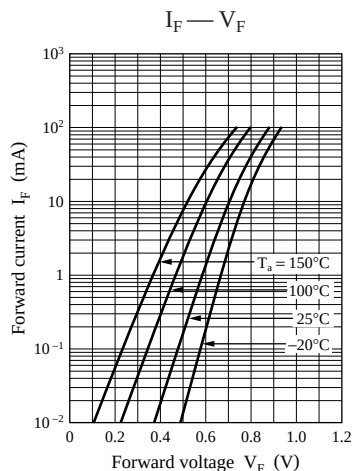
Internal Connection



Characteristics charts of MA3J142D



Characteristics charts of MA3J142E



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