

# MA3J142AG, MA3J142KG

Silicon epitaxial planar type

For switching circuits

■ Features

- Allowing high-density mounting
- Short reverse recovery time  $t_{rr}$
- Small terminal capacitance  $C_t$

■ Package

- Code  
SMini3-F2
- Pin Name  
MA3J142AG      MA3J142KG  
1: Cathode      1: Anode  
2: N.C.          2: N.C.  
3: Anode        3: Cathode

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$

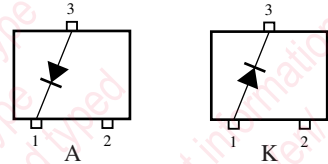
Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	80	V
Maximum peak reverse voltage	$V_{RM}$	80	V
Forward current	$I_F$	100	mA
Peak forward current	$I_{FM}$	225	mA
Non-repetitive peak forward surge current *	$I_{FSM}$	500	mA
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

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

■ Marking Symbol

MA3J142AG: MB  
MA3J142KG: MI

■ Internal Connection



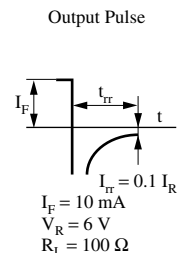
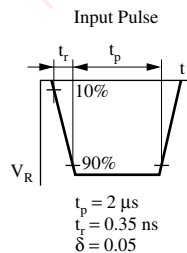
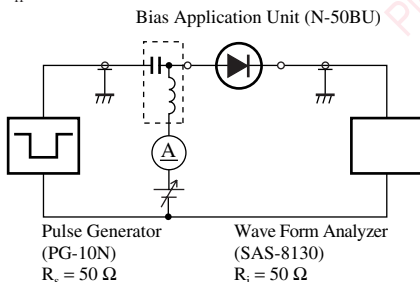
■ Electrical Characteristics  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 100\text{ mA}$			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	$C_t$	$V_R = 0\text{ V}, f = 1\text{ MHz}$			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

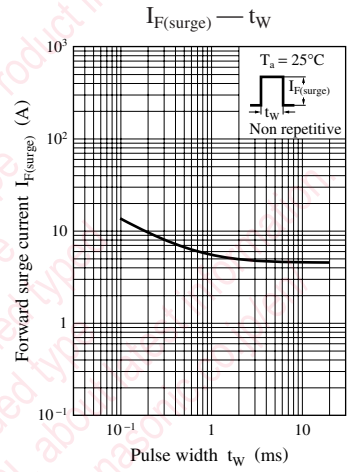
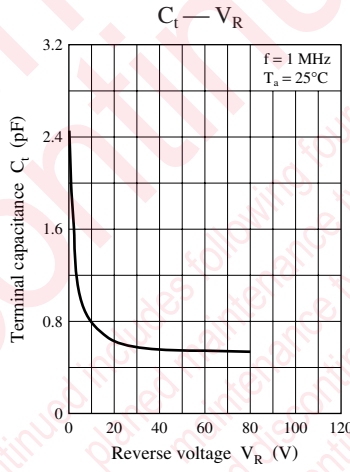
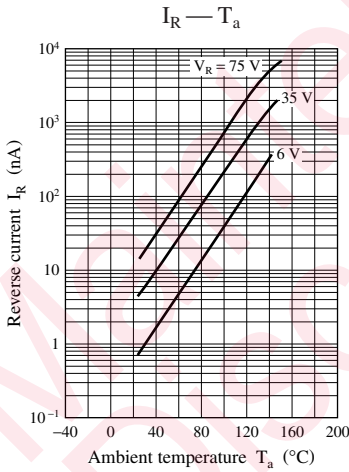
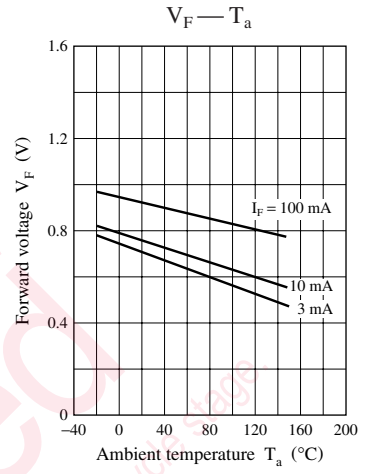
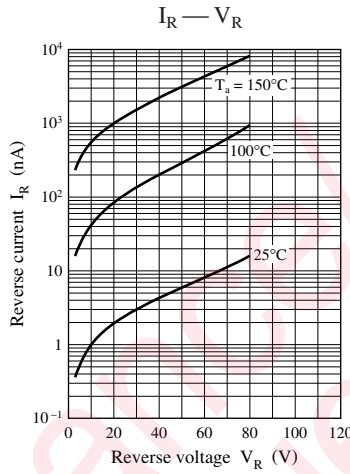
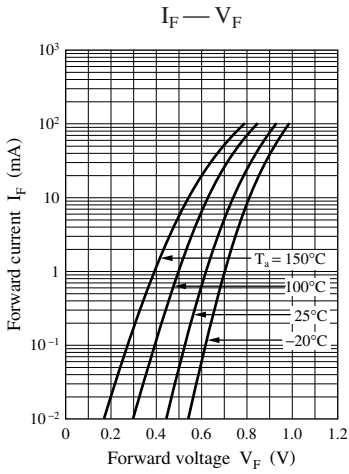
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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

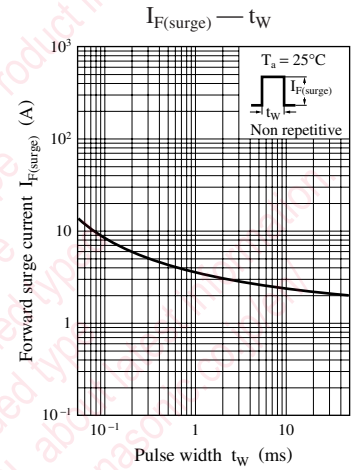
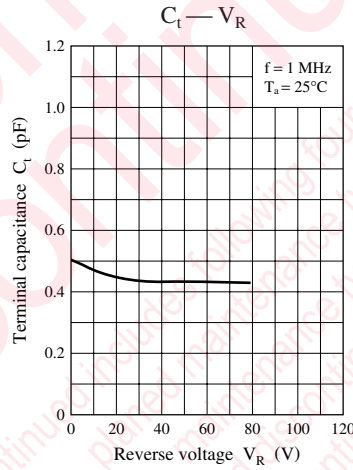
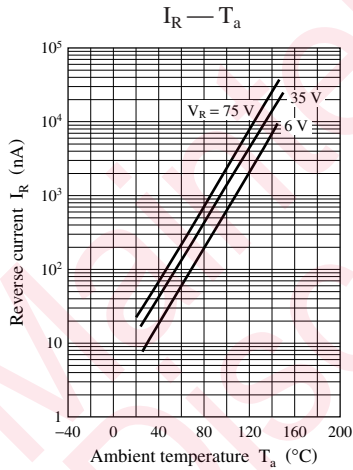
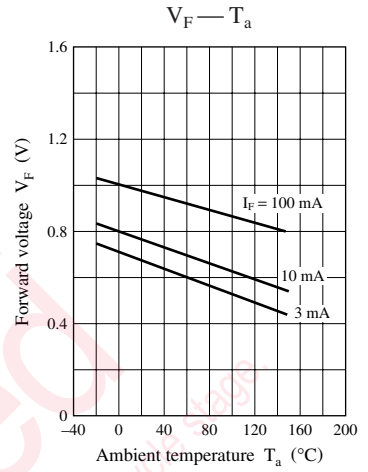
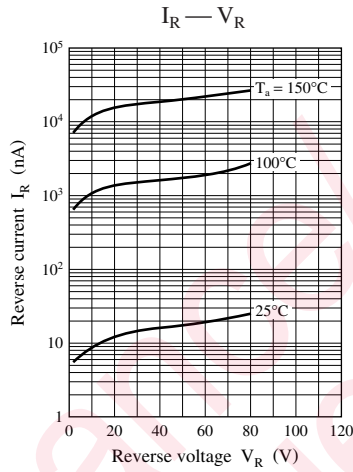
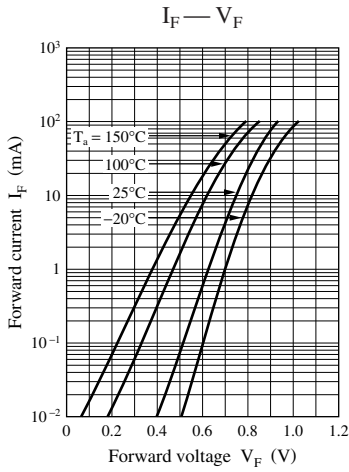
3. \*:  $t_{rr}$  measurement circuit



Characteristics charts of MA3J142AG

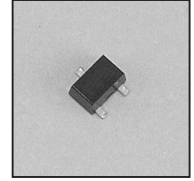
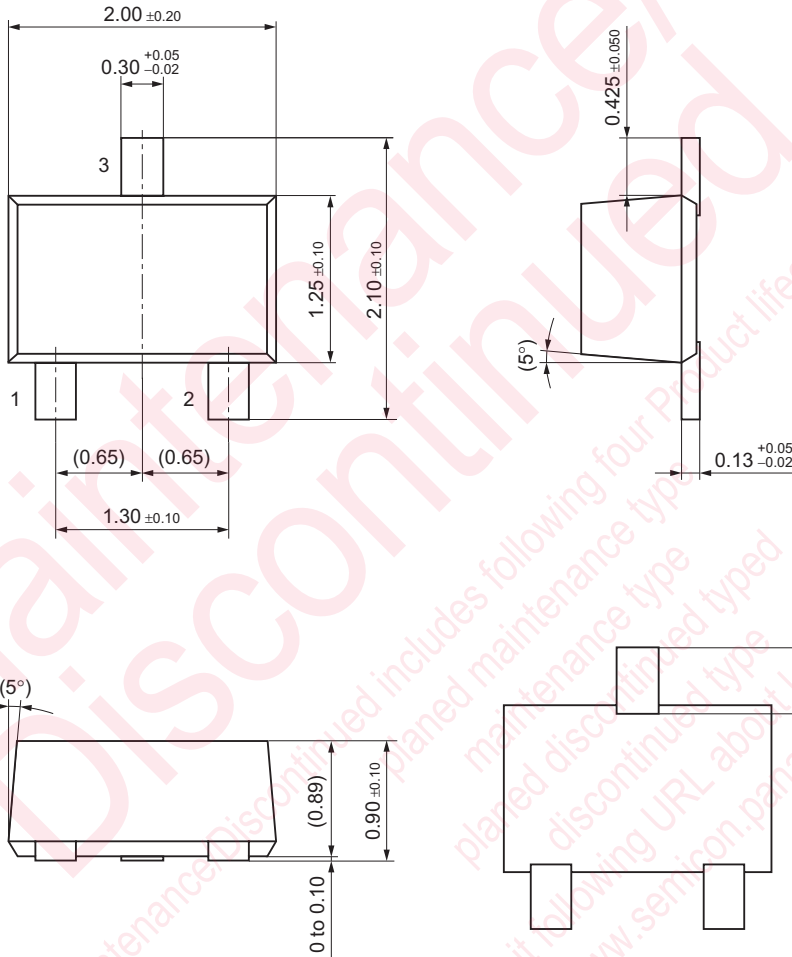


Characteristics charts of MA3J142KG



SMini3-F2

Unit: mm



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