

# MA3S137 (MA137)

## Silicon epitaxial planar type

For high-speed switching circuits

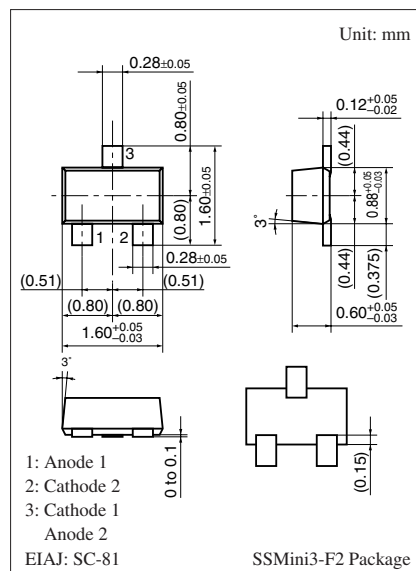
## ■ Features

- Two isolated elements contained in one package, allowing high-density mounting
- Two diodes are connected in series in the package

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

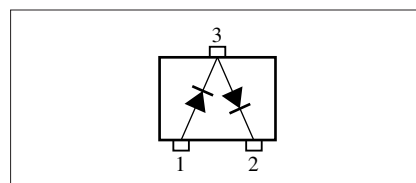
Parameter		Symbol	Rating	Unit
Reverse voltage		$V_R$	80	V
Maximum peak reverse voltage		$V_{RM}$	80	V
Forward current	Single	$I_F$	100	mA
	Series		65	
Peak forward current	Single	$I_{FM}$	225	mA
	Series		145	
Non-repetitive peak forward surge current *	Single	$I_{FSM}$	500	mA
	Series		325	
Junction temperature		$T_j$	150	°C
Storage temperature		$T_{stg}$	-55 to +150	°C

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



Marking Symbol: MS

### Internal Connection



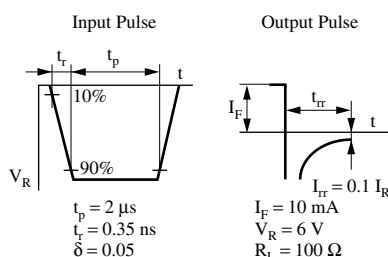
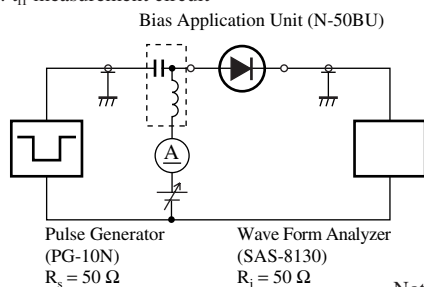
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 100 \text{ mA}$			1.2	V
Reverse voltage	$V_R$	$I_R = 100 \text{ }\mu\text{A}$	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 *	$t_{rr}$	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$ $I_{rr} = 0.1 I_R, R_L = 100 \text{ }\Omega$			3	ns

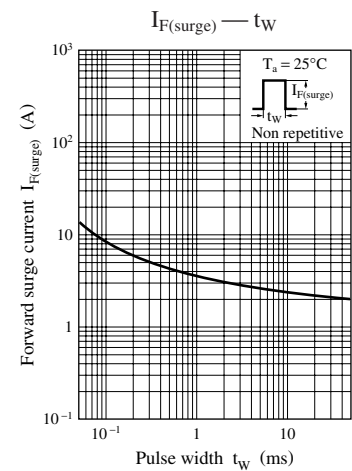
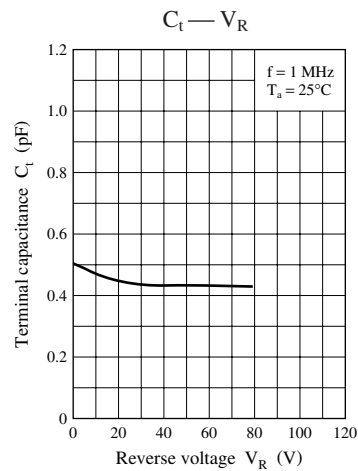
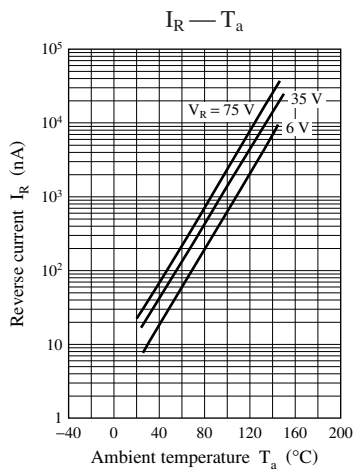
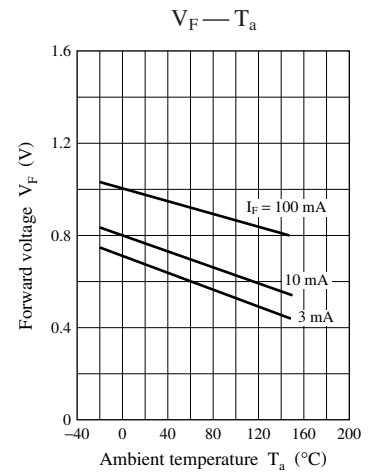
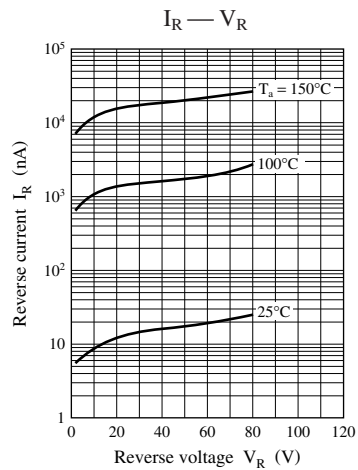
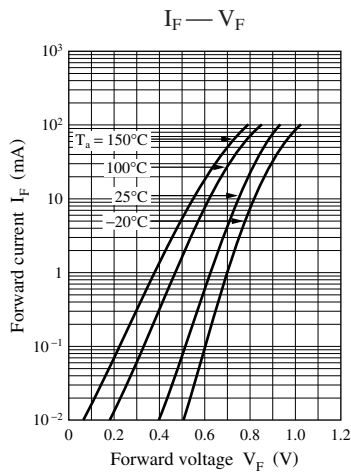
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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

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



Note) The part number in the parenthesis shows conventional part number.



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