

# MA3SD29F

## Silicon epitaxial planar type

For super high speed switching circuits

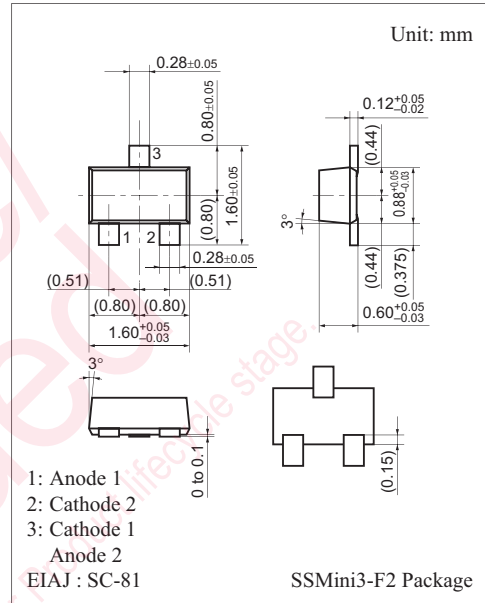
### ■ Features

- Low forward voltage  $V_F$ :  $< 0.42$  V (at  $I_F = 100$  mA)
- Optimum for high-frequency rectification
- Short reverse recovery time  $t_{rr}$

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

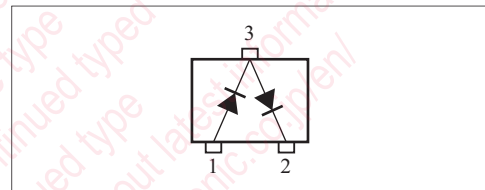
Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	30	V
Repetitive peak reverse voltage	$V_{RRM}$	30	V
Forward current (Average)	Single	100	mA
	Series	75	
Peak forward current	Single	200	mA
	Series	150	
Non-repetitive peak forward surge current *	$I_{FSM}$	1	A
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

Note) \*: 50 Hz sine wave 1 cycle (Non-repetitive peak current)



Marking Symbol: M5R

Internal Connection



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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_{F1}$	$I_F = 10$ mA		0.25	0.29	V
	$V_{F2}$	$I_F = 100$ mA		0.39	0.42	
Reverse current	$I_{R1}$	$V_R = 10$ V			25	$\mu\text{A}$
	$I_{R2}$	$V_R = 30$ V			120	
Terminal capacitance	$C_t$	$V_R = 0$ V, $f = 1$ MHz		11		pF
Reverse recovery time *	$t_{rr}$	$I_F = I_R = 100$ mA, $I_{tr} = 10$ mA, $R_L = 100$ $\Omega$		1		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 250 MHz

3. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

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

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