

# MA3X028 Series (MA28 Series)

## Silicon epitaxial planar type

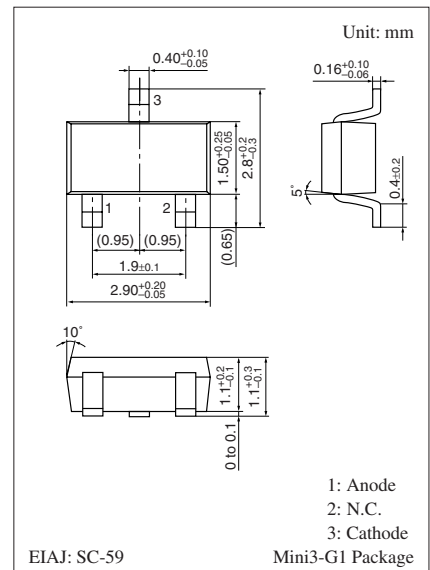
For reduced voltage and temperature compensation

### ■ Features

- Extremely small reverse current  $I_R$
- High reliability with planar structure
- Wide forward voltage  $V_F$  range

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

Parameter	Symbol	Rating	Unit	
Reverse voltage	$V_R$	6	V	
Peak forward current	MA3X0280A/B	$I_{FM}$	mA	
	MA3X028WA/WB			150
	MA3X028TA/TB			100
Power dissipation	$P_D$	150	mW	
Junction temperature	$T_j$	125	$^\circ\text{C}$	
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$	



### Marking Symbol

- MA3X0280A : MD
- MA3X0280B : ME
- MA3X028WA : MF
- MA3X028WB : MK
- MA3X028TA : ML
- MA3X028TB : MM

### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}^{*1}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit	
Forward voltage	MA3X028WA/WB	$V_{F1}$	$I_F = 10 \mu\text{A}$	0.77			V
	MA3X028TA/TB			1.15			
Forward voltage	MA3X0280A	$V_{F2}$	$I_F = 1.5 \text{ mA}$	0.56		0.61	V
	MA3X0280B			0.59		0.64	
	MA3X028WA	$I_F = 3 \text{ mA}$	1.18		1.28		
	MA3X028WB		1.26		1.36		
	MA3X028TA		1.76		1.92		
	MA3X028TB		1.88		2.04		
Reverse current	$I_R$	$V_R = 6 \text{ V}$			1.0	$\mu\text{A}$	
Temperature coefficient of forward voltage $^{*2}$	MA3X0280A/B	$-\Delta V_F / \Delta T$	$I_F = 3 \text{ mA}$		2.0		$\text{mV}/^\circ\text{C}$
	MA3X028WA/B				4.6		
	MA3X028TA/B				6.5		

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

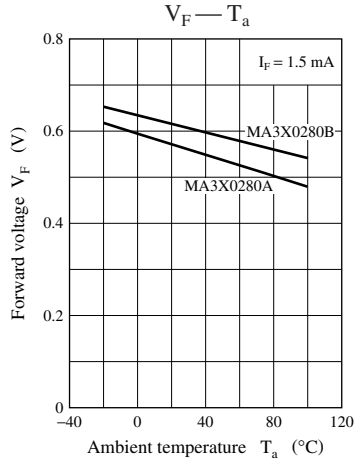
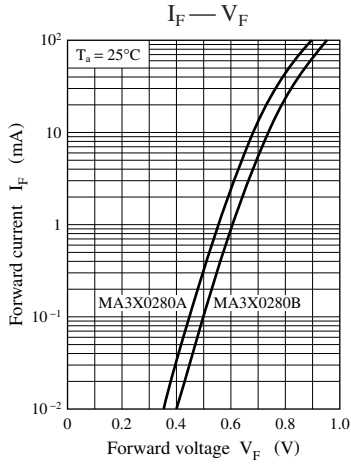
2. Absolute frequency of input and output is 100 MHz

3.  $^{*1}$ : The temperature must be controlled  $25^\circ\text{C}$  for  $V_F$  measurement.  $V_F$  value measured at other temperature must be adjusted to  $V_F(25^\circ\text{C})$ .

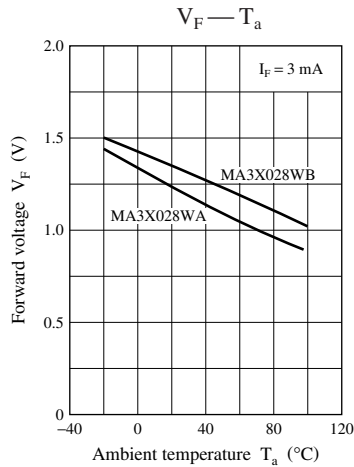
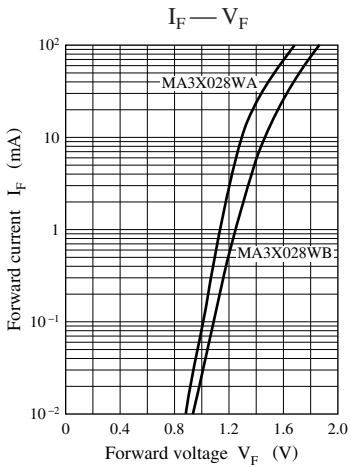
$^{*2}$ :  $T_j = 25^\circ\text{C}$  to  $150^\circ\text{C}$

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

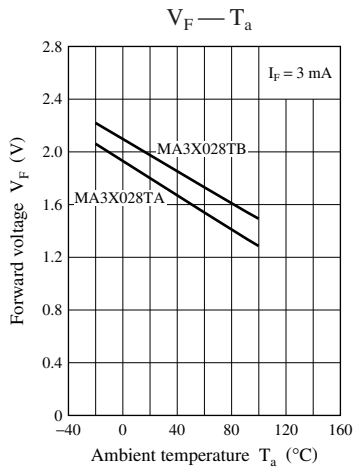
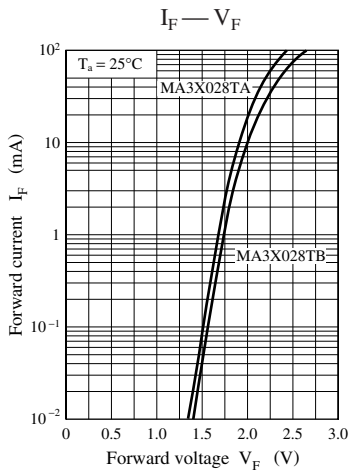
Characteristics charts of MA3X028



Characteristics charts of MA3X028W



Characteristics charts of MA3X028T



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