

MA3X028 Series (MA28 Series)

Silicon epitaxial planar type

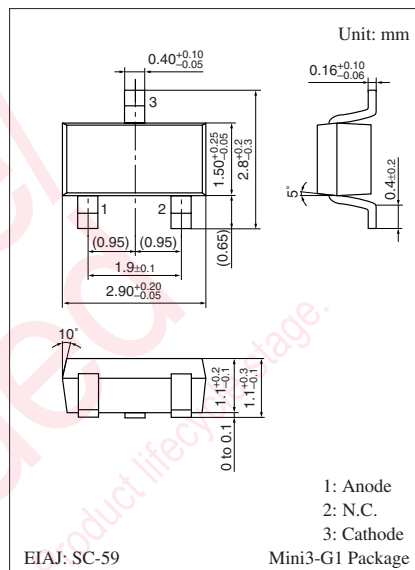
For reduced voltage and temperature compensation

■ 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}	150
	MA3X028WA/WB		100
	MA3X028TA/TB		70
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 MA3X028TA/TB	V_{F1} $I_F = 10 \mu\text{A}$	0.77			V
			1.15			
Forward voltage	MA3X0280A MA3X0280B MA3X028WA MA3X028WB MA3X028TA MA3X028TB	V_{F2} $I_F = 1.5 \text{ mA}$	0.56		0.61	V
			0.59		0.64	
		$I_F = 3 \text{ mA}$	1.18		1.28	
			1.26		1.36	
			1.76		1.92	
			1.88		2.04	
Reverse current	I_R	$V_R = 6 \text{ V}$			1.0	μA
Temperature coefficient of forward voltage ^{*2}	MA3X0280A/B MA3X028WA/B MA3X028TA/B	$-\Delta V_F / \Delta T$ $I_F = 3 \text{ mA}$		2.0		$\text{mV}/^\circ\text{C}$
				4.6		
				6.5		

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

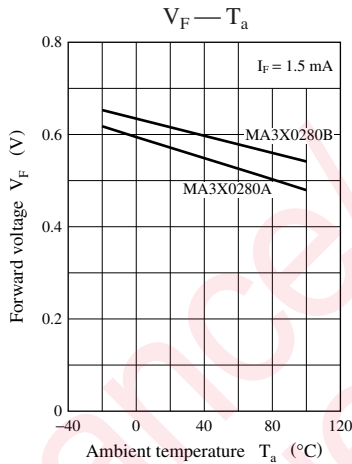
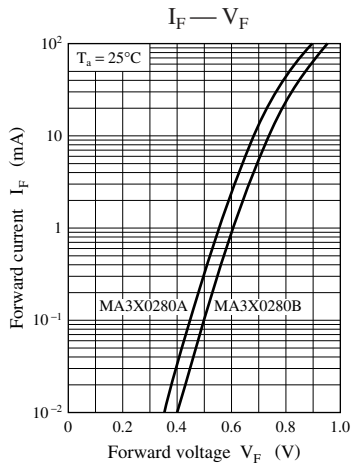
2. Absolute frequency of input and output is 100 MHz

3. *1: The temperature must be controlled 25°C for V_F measurement. V_F value measured at other temperature must be adjusted to V_F (25°C).

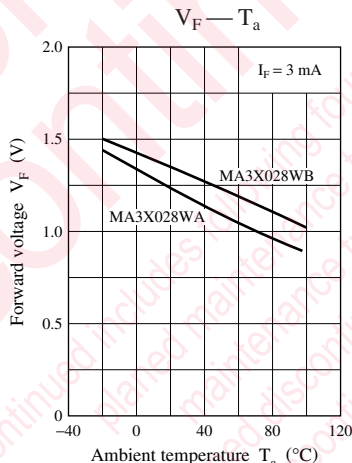
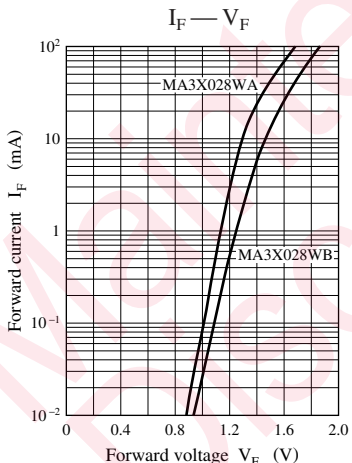
*2: $T_j = 25^\circ\text{C}$ to 150°C

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

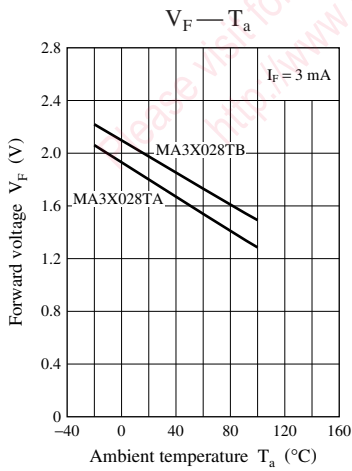
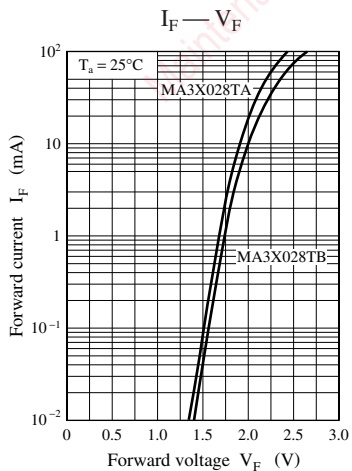
Characteristics charts of MA3X028



Characteristics charts of MA3X028W



Characteristics charts of MA3X028T



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