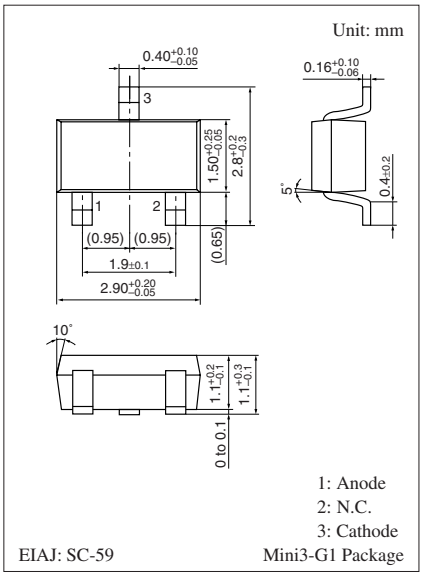
MA3X028 Series (MA28 Series)

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 $T_a = 25°C$

Parameter		Symbol	Rating	Unit
Reverse voltage		V_R	6	V
Peak forward current	MA3X0280A/B	I_{FM}	150	mA
	MA3X028WA/WB		100	
	MA3X028TA/TB		70	
Power dissipation		P_D	150	mW
Junction temperature		T_j	125	°C
Storage temperature		T_{stg}	−55 to +125	°C

Marking Symbol

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

■ Electrical Characteristics $T_a = 25°C \pm 3°C$ *1

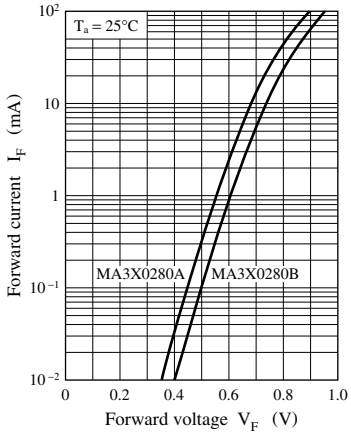
Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	MA3X028WA/WB	V_{F1}	$I_F = 10$ μA	0.77			V
	MA3X028TA/TB			1.15			
Forward voltage	MA3X0280A	V_{F2}	$I_F = 1.5$ mA	0.56		0.61	V
	MA3X0280B			0.59		0.64	
	MA3X028WA		$I_F = 3$ mA	1.18		1.28	
	MA3X028WB			1.26		1.36	
	MA3X028TA			1.76		1.92	
	MA3X028TB			1.88		2.04	
Reverse current		I_R	$V_R = 6$ V			1.0	μA
Temperature coefficient of forward voltage *2	MA3X0280A/B	$-\Delta V_F/\Delta T$	$I_F = 3$ mA		2.0		mV/°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°C for V_F measurement. V_F value measured at other temprature must be adjusted to V_F (25°C).
*2: $T_j = 25°C$ to 150°C

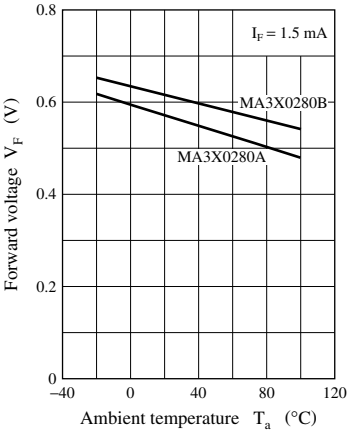
Note) The part numbers in the parenthesis show conventional part number.

Characteristics charts of MA3X028

I_F — V_F

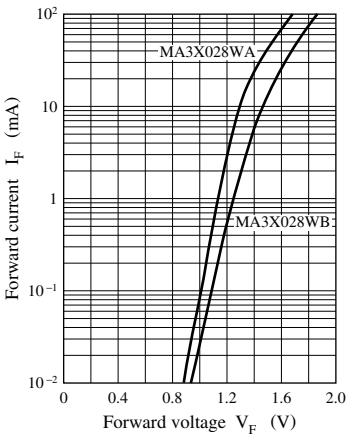


V_F — T_a

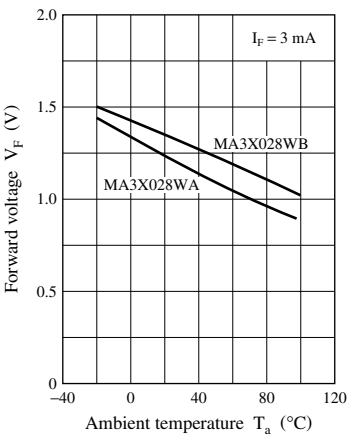


Characteristics charts of MA3X028W

I_F — V_F

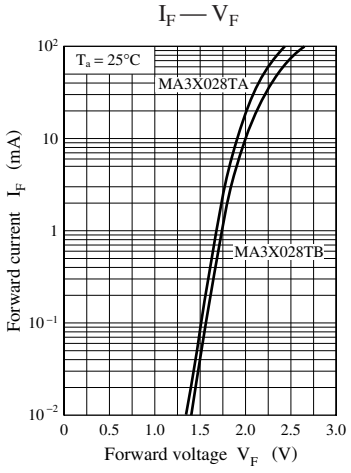


V_F — T_a

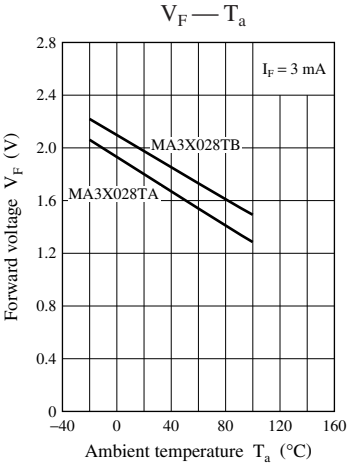


Characteristics charts of MA3X028T

I_F — V_F



V_F — T_a



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