

# MA2B027 Series (MA27 Series)

## Silicon epitaxial planar type variable resistor

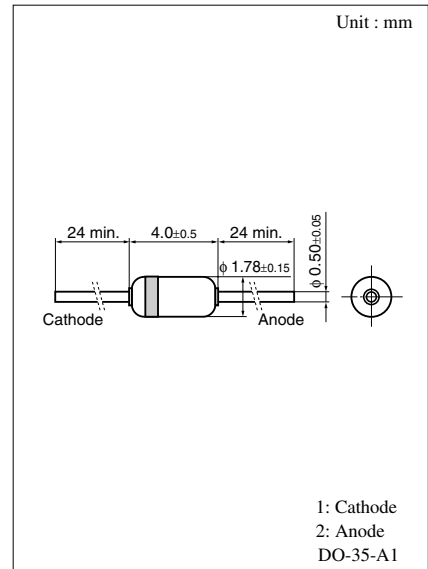
For temperature and reduced voltage compensation

### ■ Features

- High reliability achieved through combination of a planar type chip and glass sealing structure
- Easy mounting because of employing DO-35 (DHD) envelope
- Extremely small reverse current  $I_R$
- Large power dissipation
- Wide forward voltage  $V_F$  range

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

Parameter	Symbol	Rating	Unit	
Reverse voltage (DC)	$V_R$	6	V	
Forward current (DC)	MA2B0270A/B	$I_{FM}$	mA	
	MA2B027WA/WB			150
	MA2B027TA/TB			100
	MA2B027QA/QB			70
Power dissipation	$P_D$	150	mW	
Junction temperature	$T_j$	150	$^\circ\text{C}$	
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$	



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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit			
Reverse current (DC)	$I_R$	$V_R = 6\text{ V}$			10	$\mu\text{A}$			
					1				
		Forward voltage (DC)	$V_{F1}$	$I_F = 1.5\text{ mA}$			0.56	0.61	V
							0.59	0.64	
$I_F = 10\text{ }\mu\text{A}$				0.77					
				1.15					
				1.60					
Forward voltage (DC)	$V_{F2}$	$I_F = 50\text{ mA}$			1.1	V			
			$I_F = 3\text{ mA}$		1.18		1.28		
				1.26	1.36				
				1.76	1.92				
				1.88	2.04				
				2.20	2.40				
			2.34	2.54					
Temperature coefficient of forward voltage	$-\Delta V_F/\Delta T$	$I_F = 1.5\text{ mA}$		2.0		$\text{mV}/^\circ\text{C}$			
			$I_F = 3\text{ mA}$		4.6				
					6.5				
					8.8				

Note) Rated input/output frequency: 100 MHz

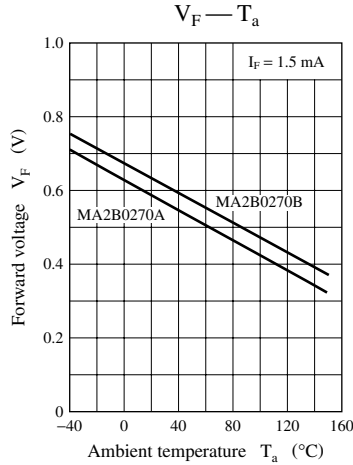
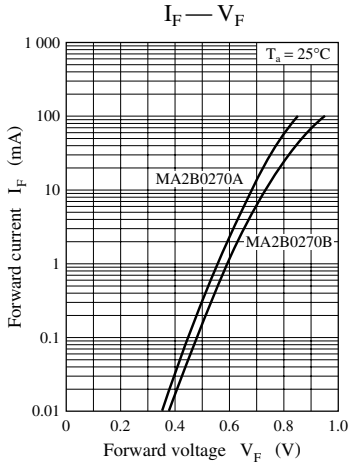
### ■ Cathode Indication

Type No.	MA2B0270A	MA2B0270B	MA2B027WA	MA2B027WB	MA2B027TA*	MA2B027TB*	MA2B027QA*	MA2B027QB*
Color	Yellow	Blue	Light Blue	Brown	Yellow	Blue	Green	Brown

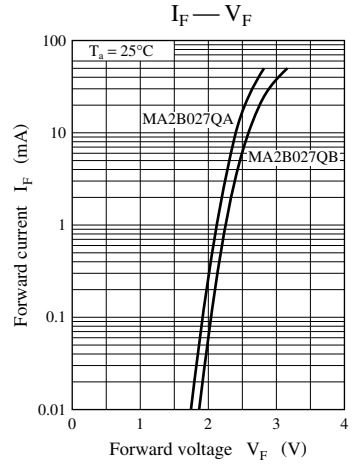
Note) \* : Body Color ; Black

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

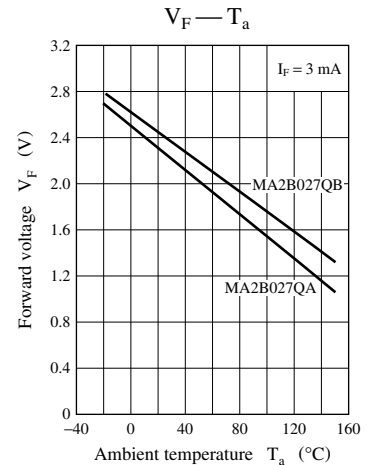
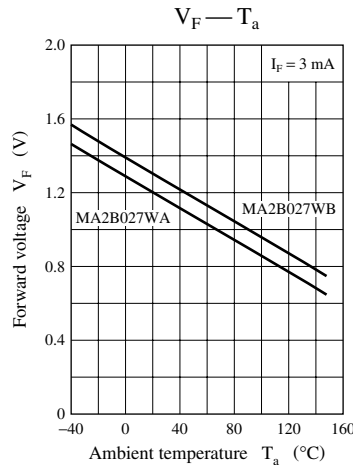
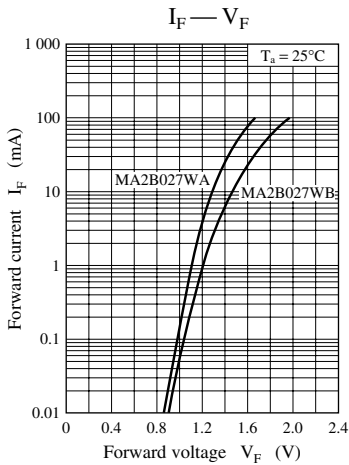
Characteristics charts of MA2B027



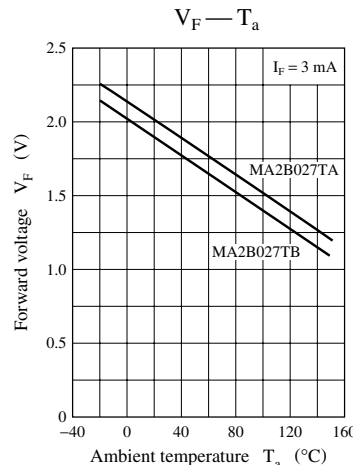
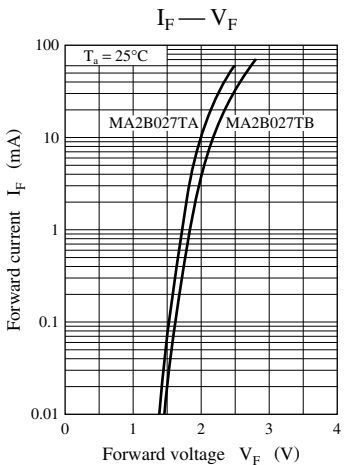
Characteristics charts of MA2B027Q



Characteristics charts of MA2B027W



Characteristics charts of MA2B027T



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