

# MA2B027 Series (MA27 Series)

## Silicon epitaxial planar type variable resistor

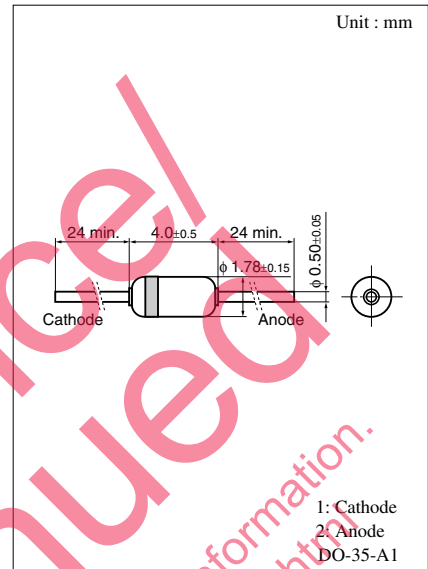
For temperature and reduced voltage compensation

### ■ 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	$I_{FM}$	150	mA
	MA2B027WA/WB		100	
	MA2B027TA/TB		70	
	MA2B027QA/QB		50	
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)	MA2B0270A/B	$I_R$ $V_R = 6\text{ V}$			10	$\mu\text{A}$
	MA2B027WA/WB				1	
	MA2B027TA/TB					
	MA2B027QA/QB					
Forward voltage (DC)	MA2B0270A	$V_{F1}$ $I_F = 1.5\text{ mA}$	0.56		0.61	V
	MA2B0270B		0.59		0.64	
	MA2B027WA/WB	$I_F = 10\text{ }\mu\text{A}$	0.77			
	MA2B027TA/TB		1.15			
	MA2B027QA/QB		1.60			
Forward voltage (DC)	MA2B0270A/B	$V_{F2}$ $I_F = 50\text{ mA}$			1.1	V
	MA2B027WA		$I_F = 3\text{ mA}$	1.18		
	MA2B027WB		1.26		1.36	
	MA2B027TA		1.76		1.92	
	MA2B027TB		1.88		2.04	
	MA2B027QA		2.20		2.40	
	MA2B027QB		2.34		2.54	
Temperature coefficient of forward voltage	MA2B0270A/B	$-\Delta V_F/\Delta T$ $I_F = 1.5\text{ mA}$		2.0		mV/ $^\circ\text{C}$
	MA2B027WA/WB		$I_F = 3\text{ mA}$		4.6	
	MA2B027TA/TB				6.5	
	MA2B027QA/QB				8.8	

Note) Rated input/output frequency: 100 MHz

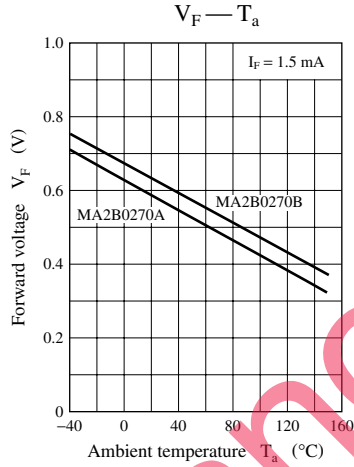
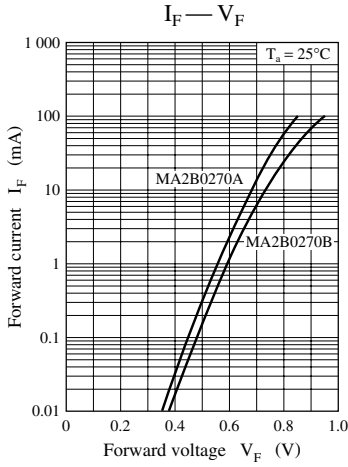
### ■ Cathode Indication

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

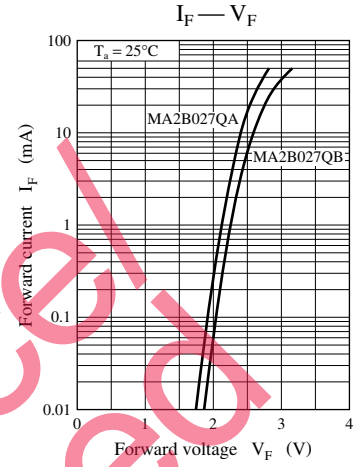
Note) \* : Body Color ; Black

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

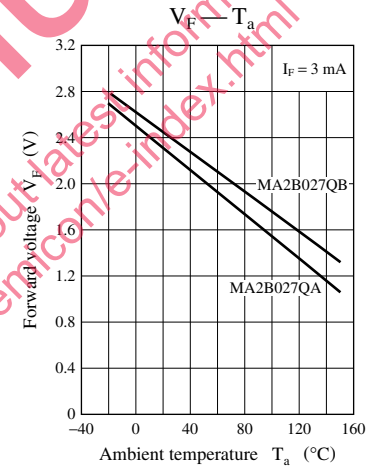
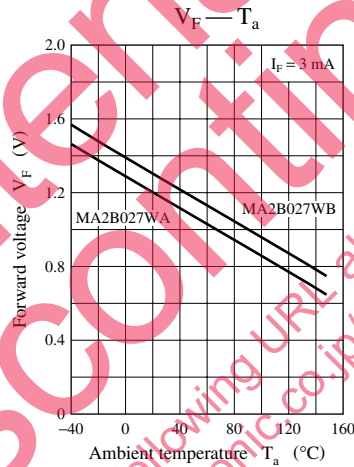
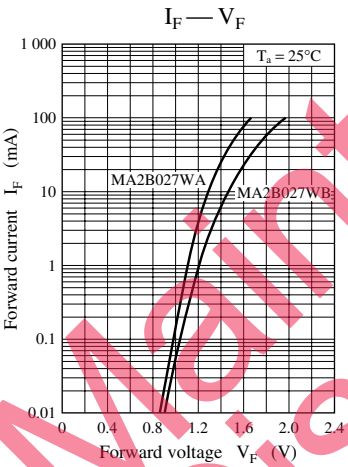
Characteristics charts of MA2B027



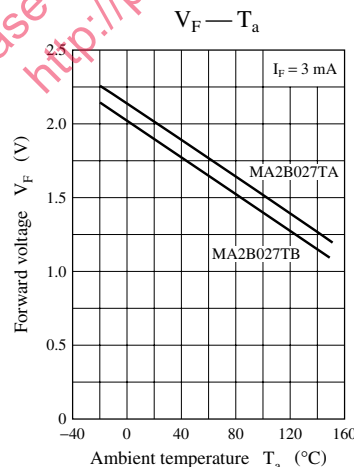
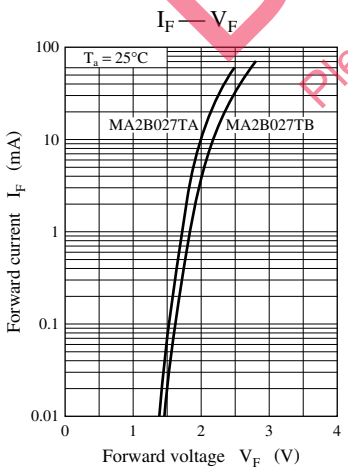
Characteristics charts of MA2B027Q



Characteristics charts of MA2B027W



Characteristics charts of MA2B027T



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