

# MA2B027 Series

## Silicon epitaxial planar type variable resistor

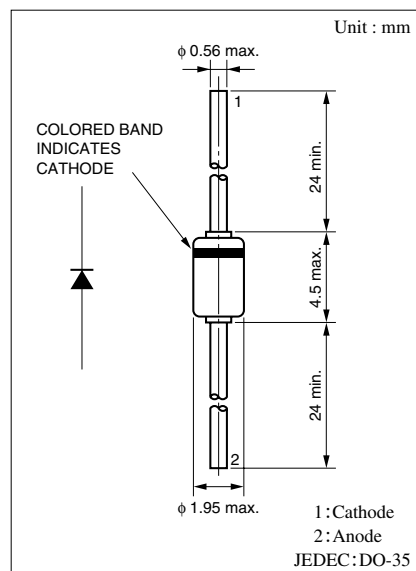
For temperature and reduced voltage compensation

### ■ 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		$V_R = 6\text{ V}$			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		1.28	
	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		$\text{mV}/^\circ\text{C}$
	MA2B027WA/WB		$I_F = 3\text{ mA}$		4.6		
	MA2B027TA/TB				6.5		
	MA2B027QA/QB				8.8		

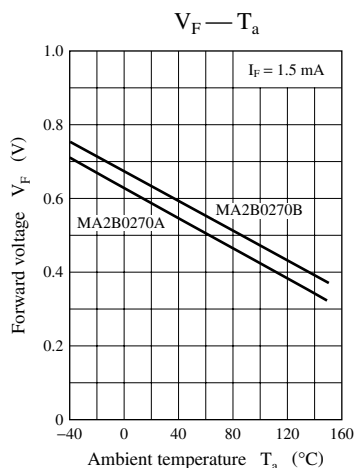
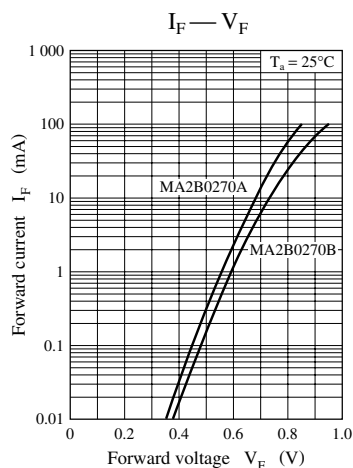
Note) Rated input/output frequency: 100 MHz

### ■ Cathode Indication

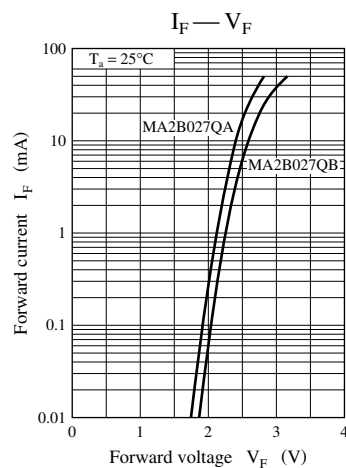
Type No.	MA2B0270A	MA2B0270B	MA2B027WA	MA2B027WB	MA2B027TA*	MA2B027TB*	MA2B027QA*	MA2B027QB*
Color	Yellow	Blue	Light Blue	Brown	Yellow	Blue	Green	Brown

Note) \* : Body Color ; Black

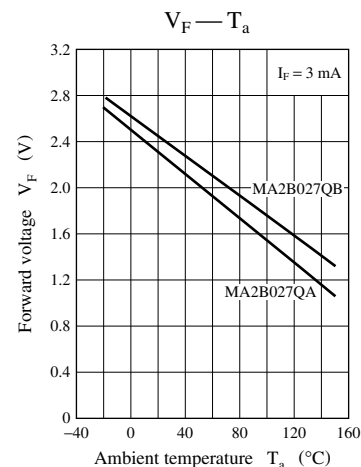
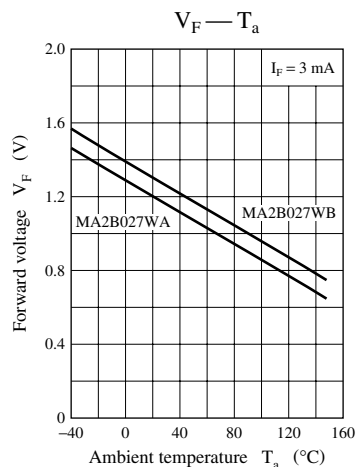
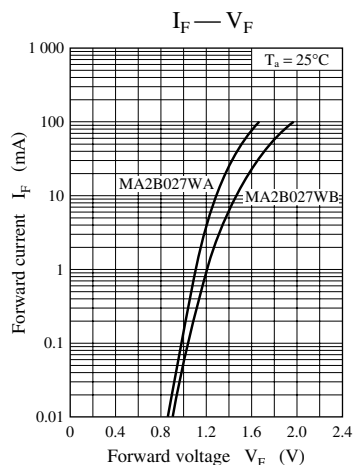
Characteristics charts of MA2B027



Characteristics charts of MA2B027Q



Characteristics charts of MA2B027W



Characteristics charts of MA2B027T

