

MA2B027 Series (MA27 Series)

Silicon epitaxial planar type variable resistor

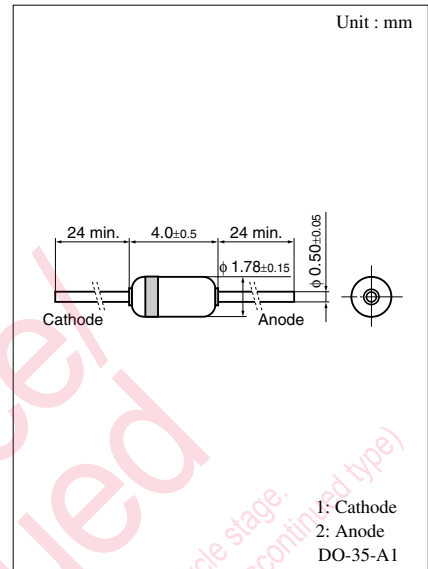
For temperature and reduced voltage compensation

■ 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	μA		
					1			
Forward voltage (DC)	V_{F1}	$I_F = 1.5\text{ mA}$			0.56	V		
					0.59			
					$I_F = 10\ \mu\text{A}$		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

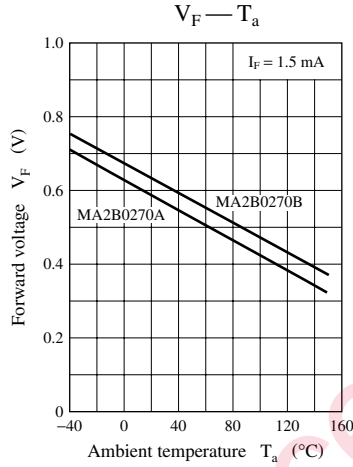
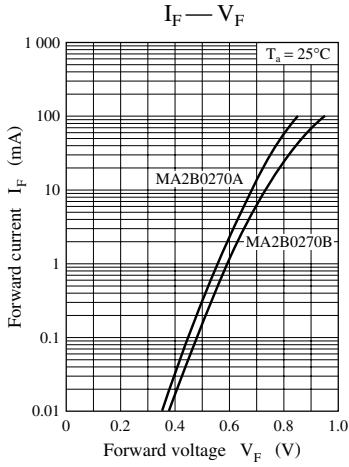
■ Cathode Indication

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

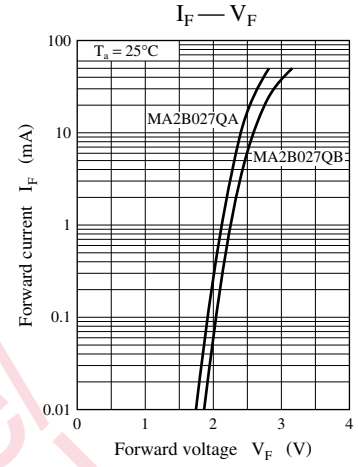
Note) * : Body Color ; Black

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

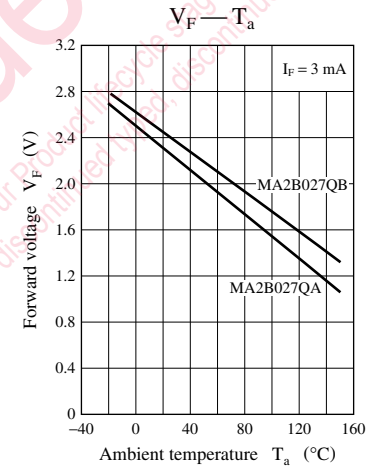
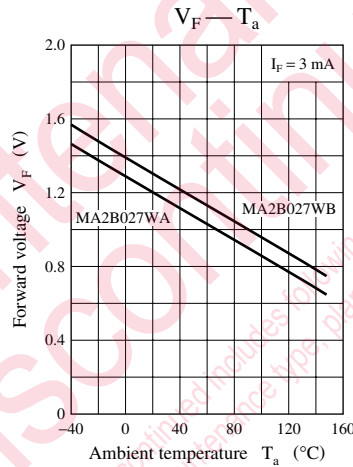
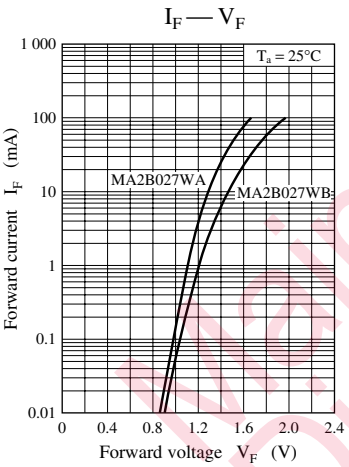
Characteristics charts of MA2B027



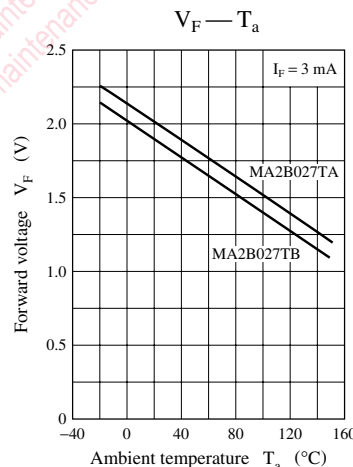
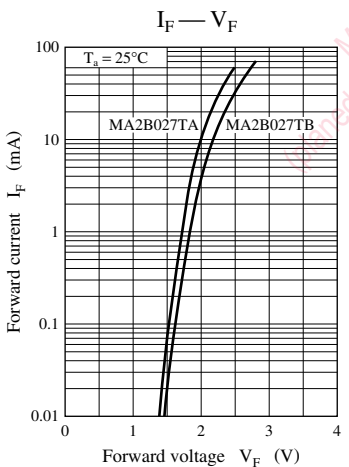
Characteristics charts of MA2B027Q



Characteristics charts of MA2B027W



Characteristics charts of MA2B027T



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