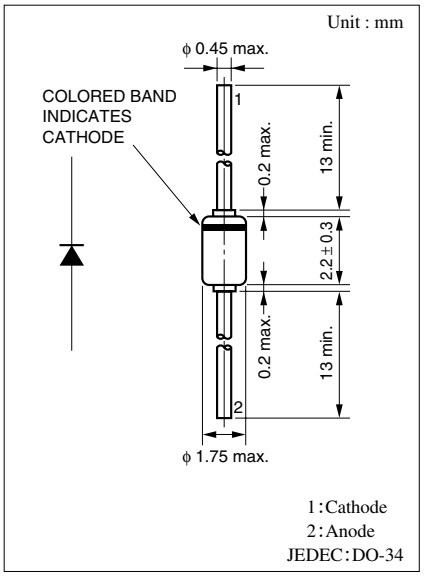
MA2C029 Series

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 $T_a = 25°C$

Parameter		Symbol	Rating	Unit
Reverse voltage (DC)		V_R	6	V
Forward current (DC)	MA2C0290A/B	I_{FM}	150	mA
	MA2C029WA/WB		100	
	MA2C029TA/TB		70	
	MA2C029QA/QB		50	
Power dissipation		P_{tot}	150	mW
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	−55 to +150	°C

■ Electrical Characteristics $T_a = 25°C$

Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	MA2C0290A/B	I_R	V_R = 6 V			10	μA
	MA2C029WA/WB		V_R = 6 V			1	
	MA2C029TA/TB						
	MA2C029QA/QB						
Forward voltage (DC)	MA2C0290A	V_{F1}	I_F = 1.5 mA	0.56		0.61	V
	MA2C0290B			0.59		0.64	
	MA2C029WA/WB		V_{F1} = 10 μA	0.77			
	MA2C029TA/TB			1.15			
	MA2C029QA/QB			1.60			
Forward voltage (DC)	MA2C0290A/B	V_{F2}	I_F = 50 mA			1.1	V
	MA2C029WA		I_F = 3 mA	1.18		1.28	
	MA2C029WB			1.26		1.36	
	MA2C029TA			1.76		1.92	
	MA2C029TB			1.88		2.04	
	MA2C029QA			2.20		2.40	
	MA2C029QB			2.34		2.54	
Temperature coefficient of forward voltage	MA2C0290A/B	$-\Delta V_F/\Delta T$	I_F = 1.5 mA (T_j = 25°C to +150°C)		2.0		mV/°C
	MA2C029WA/WB		I_F = 3 mA (T_j = 25°C to +150°C)		4.6		
	MA2C029TA/TB				6.5		
	MA2C029QA/QB				8.8		

Note) Rated input/output frequency: 100 MHz

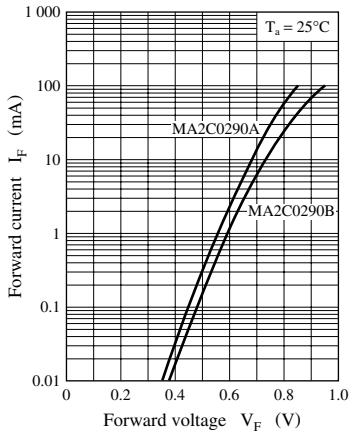
■ Cathode Indication

Type No.	MA2C0290A	MA2C0290B	MA2C029WA	MA2C029WB	MA2C029TA*	MA2C029TB*	MA2C029QA*	MA2C029QB*
Color	Red	Blue	Light Blue	Brown	Yellow	Blue	Green	Brown

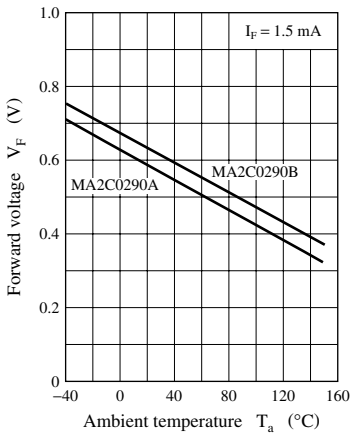
Note) * : Body Color ; Black

Characteristics charts of MA2C029

I_F — V_F

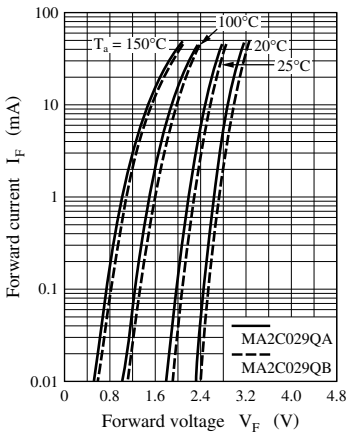


V_F — T_a



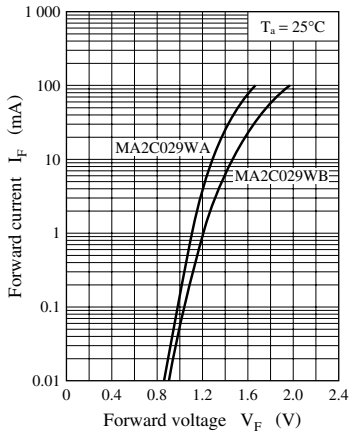
Characteristics charts of MA2C029Q

I_F — V_F

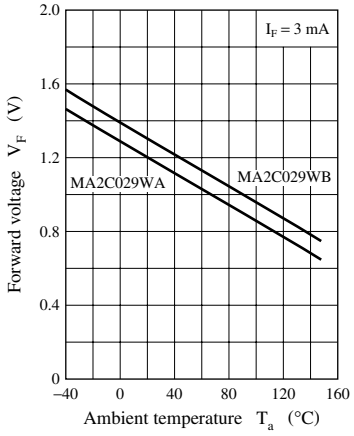


Characteristics charts of MA2C029W

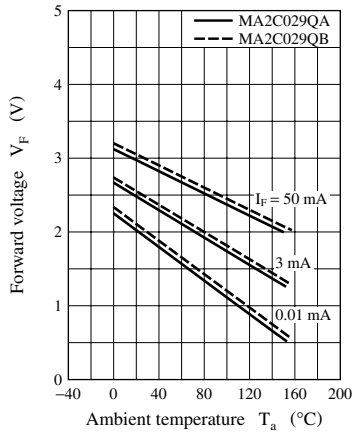
I_F — V_F



V_F — T_a

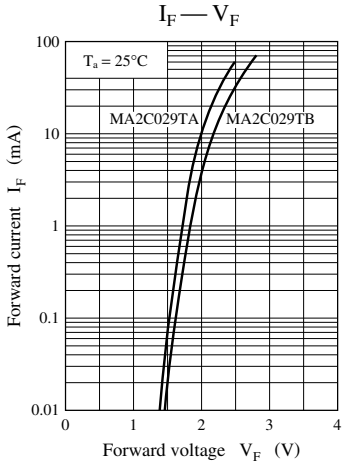


V_F — T_a



Characteristics charts of MA2C029T

I_F — V_F



V_F — T_a