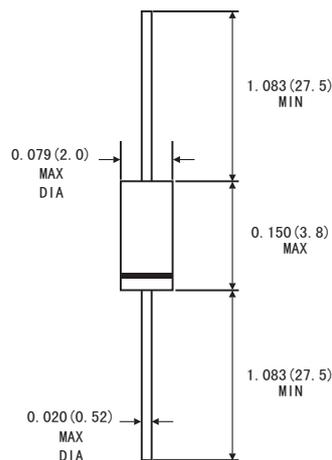


### FEATURES

- Low forward voltage drop
- Satisfactory wave detection efficiency
- Small temperature coefficient of forward characteristics
- Extremely low reverse current
- These products are ideal for use in ordinary wave detection and super high speed switching circuits
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

### DO-35



### MECHANICAL DATA

- Case: DO-35 glass case
- Polarity: Color band denotes cathode end
- Product Sign: Marking MA700 or MA700A on body
- Weight: Approx. 0.13 gram

### ABSOLUTE RATINGS (LIMITING VALUES)

Dimensions in inches and (millimeters)

Parameters	Symbols	Value	Units
Reverse voltage	MA700	15	V
	MA700A	30	
Peak reverse voltage	MA700	15	V
	MA700A	30	
Average rectified current	$I_o$	30	mA
Peak forward current	$I_{FM}$	150	mA
Junction temperature	$T_J$	125	°C
Storage temperature	$T_{STG}$	-55 to +125	°C

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C)

Parameters	Symbols	Test Conditions	Min.	Typ.	Max.	Units
Forward voltage(DC)	V <sub>F1</sub>	I <sub>F</sub> =1mA			0.4	V
	V <sub>F2</sub>	I <sub>F</sub> =30mA			1	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =15V			100	nA
		V <sub>R</sub> =30V			150	
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =1V f=1MHz		1.3		pF
Rectifier efficiency	η	V <sub>in</sub> =3Vrms f=30MHz R <sub>L</sub> =3.9kΩ C <sub>L</sub> =10pF		60		%
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA I <sub>R</sub> =1mA, R <sub>L</sub> =100kΩ		1		ns

Note: 1. Schottky barrier rectifier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on charge of a human body and leakage from the equipment used.

# RATINGS AND CHARACTERISTICS CURVES MA700,MA700A

Figure 1. Forward voltage VS. forward current

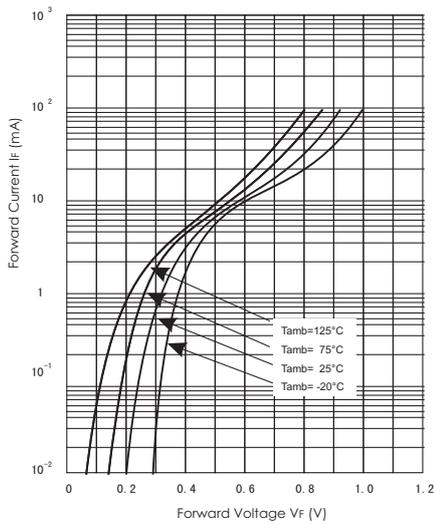


Figure 3. MA700 Reverse characteristics

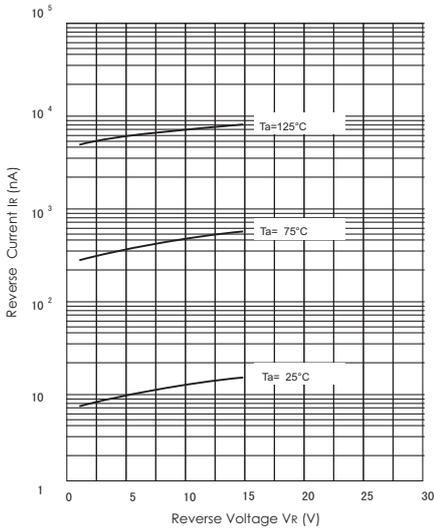


Figure 2. Forward voltage VS. Ambient Temperature

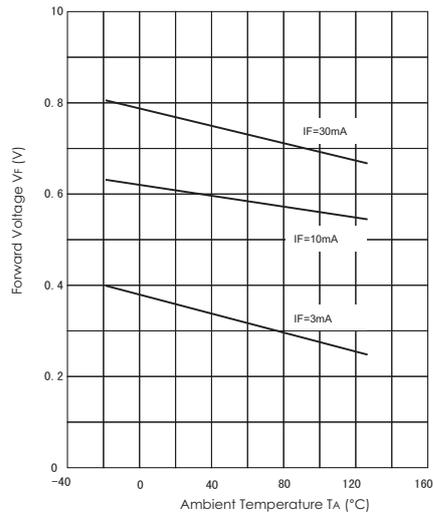


Figure 4. MA700 Junction Capacitance

