MA700 THRU MA700A

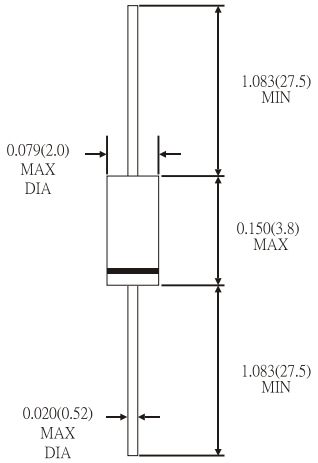
SMALL SIGNAL SCHOTTKY DIODES

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

DO-35



Dimensions in inches and (millimeters)

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) (T_A= 25˚C)

Parameters		Symbols	Value	Units
Reverse voltage	MA700	V_R	15	V
	MA700A		30	
Peak revers voltage	MA700	V_{RM}	15	V
	MA700A		30	
Average rectified current		I_O	30	mA
Peak forward current		I_{FM}	150	mA
Junction temperature		T_J	125	℃
Storage temperature		T_{STG}	-55 to+125	℃

ELECTRICAL CHARACTERISTICS (T_A= 25˚C)

Parameters		Symbol	Test Conditions	Min.	Typ.	Max.	Units
Forward voltage(DC)		V_{F1}	I_F=1mA			0.4	V
		V_{F2}	I_F=30mA			1	V
Reverse Current	MA700	I_R	V_R=15V			100	nA
	MA700A		V_R=30V			150	
Junction Capacitance		C_J	V_R=1V f=1MHz		1.3		pF
Rectifier efficiency			V_{in}=3Vrms f=30MHz R_L=3.9k C_L=10pF		60		%
Reverse recovery time		t_{rr}	I_F=I_R=10mA I_{rr}=1mA,R_L=100k		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 THRU MA700A

Figure 1. Forward voltage VS. forward current

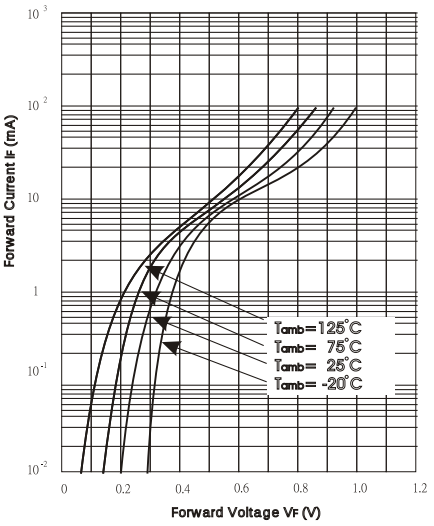


Figure 2. Forward voltage VS.Ambient Temperutu

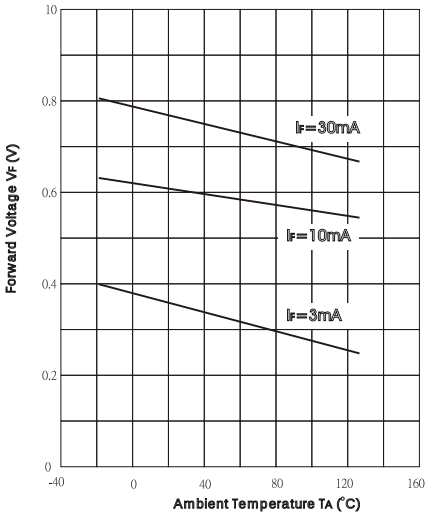


Figure 3. MA700 Reserse characteristics

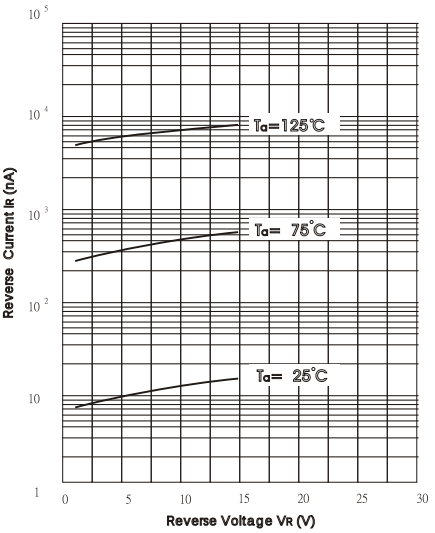


Figure 4. MA700 Junction Capacitance

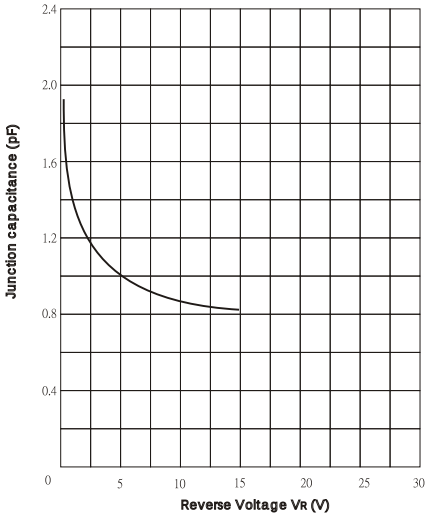


Figure 5. MA700 reverse current temperature characteristics

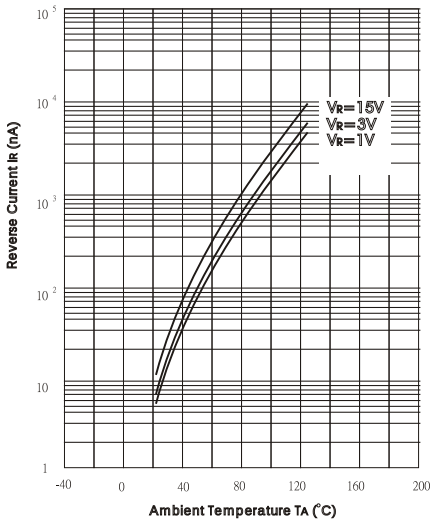


Figure 6. MA700A reverse characteristics

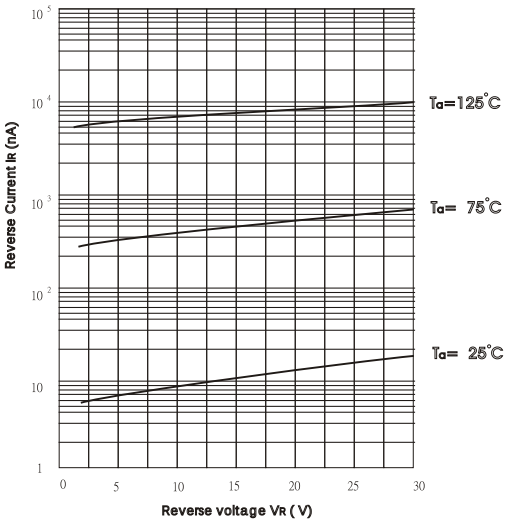


Figure 7. MA700A Junction Capacitance

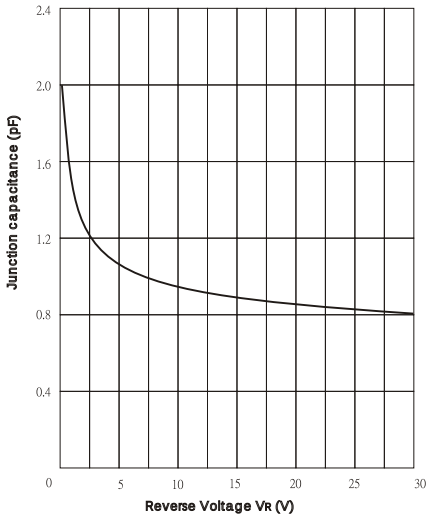


Figure 8. MA700A reverse current temperature characteristics