

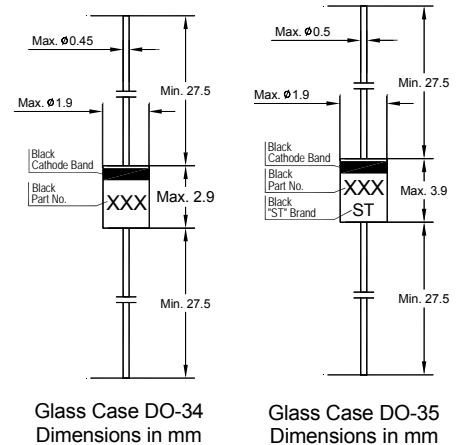
MA700, MA700A

SILICON EPITAXIAL PLANAR TYPE SCHOTTKY BARRIER DIODES

for ordinary wave detection
for super high speed switching

Features

- Low forward rise voltage (V_F) and satisfactory wave detection efficiency (η)
- Small temperature coefficient of forward characteristic
- Extremely low reverse current (I_R)

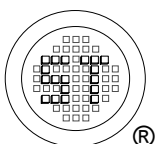


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	MA700	15
		MA700A	30
Reverse Voltage	V_R	MA700	15
		MA700A	30
Forward Current	I_F	30	mA
Peak Forward Current	I_{FM}	150	mA
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_S	- 55 to + 125	$^\circ\text{C}$

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Typ.	Max.	Unit
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 30\text{ mA}$	V_F	-	0.4	V
		-	1	
Reverse Current at $V_R = 15\text{ V}$ at $V_R = 30\text{ V}$	I_R	-	600	nA
		MA700 MA700A	-	
Terminal Capacitance at $V_R = 1\text{ V}$, $f = 1\text{ MHz}$	C_T	1.3	-	pF
Reverse Recovery Time at $I_F = I_R = 10\text{ mA}$, $I_{rr} = 1\text{ mA}$, $R_L = 100\ \Omega$	t_{rr}	1	-	ns
Detection Efficiency at $V_{in} = 3\text{ V}_{(peak)}$, $f = 30\text{ MHz}$, $R_L = 3.9\text{ K}\Omega$, $C_L = 10\text{ pF}$	η	60	-	%



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company
listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002 Certificate No. 05103 ISO 14001:2004 Certificate No. 7116 ISO 9001:2000 Certificate No. 0506098

Dated : 15/08/2007