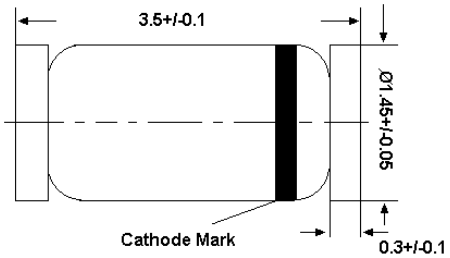
LL700, LL700A

SILICON EXPITAXIAL PLANAR TYPE SCHOTTKY BARRIER DIODES

for Ordinary Wave Detection
for Super High Speed Switching



Glass case MiniMELF

Weight approx.0.05g
Dimensions in mm

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°C)

Parameter		Symbol	Rating	Unit
Reverse Voltage (DC)	LL700	V_R	15	V
	LL700A		30	
Peak Reverse Voltage	LL700	V_{RM}	15	V
	LL700A		30	
Forward Current (DC)		I_F	30	mA
Peak Forward Current		I_{FM}	150	mA
Junction Temperature		T_j	125	°C
Storage Temperature Range		T_S	-55 to +125	°C

Characteristics at T_a = 25°C

Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Forward Voltage (DC)		V_{F1}	I_F = 1mA	-	-	0.4	V
		V_{F2}	I_F = 30mA	-	-	1	
Reverse Current (DC)	LL700	I_R	V_R = 15V	-	-	100	nA
	LL700A		V_R = 30V	-	-	150	
Terminal Capacitance		C_t	V_R = 1V, f = 1MHz	-	1.3	-	pF
Reverse Recovery Time*		t_{rr}	$I_F = I_R$ = 10mA I_{rr} = 1mA, R_L = 100Ω	-	1	-	ns
Detection Efficiency		η	$V_{in} = 3V_{(peak)}$, f = 30MHz R_L = 3.9kΩ, C_L = 10pF	-	60	-	%

Note: (1) Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
(2) Rated input / output frequency: 2,000MHz.
(3) *: t_{rr} measuring instrument