



# Schottky Barrier Diode

## Features

1. High reliability
2. Low reverse current and low forward voltage



## Applications

Low current rectification and high speed switching

## Construction

Silicon epitaxial planar

## Absolute Maximum Ratings

T<sub>j</sub>=25 °C

Parameter	Test Conditions	Type	Symbol	Value	Unit
Repetitive peak reverse voltage		LL60	V <sub>RRM</sub>	40	V
		LL60P	V <sub>RRM</sub>	45	V
Peak forward surge current	t <sub>p</sub> ≤1 s	LL60	I <sub>FSM</sub>	150	mA
		LL60P	I <sub>FSM</sub>	500	mA
Forward continuous current	T <sub>a</sub> =25 °C	LL60	I <sub>F</sub>	30	mA
		LL60P	I <sub>F</sub>	50	mA
Storage temperature range			T <sub>stg</sub>	-65~+125	°C

Stresses exceeding maximum ratings may damage the device. Maximum ratings are stress ratings only. Functional operation above the recommended operating conditions is not implied. Extended exposure to stresses above the recommended operating conditions may affect device reliability.

**Excel Semiconductor**



## Electrical Characteristics

T<sub>j</sub>=25 °C

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	I <sub>F</sub> =1mA	LL60	V <sub>F</sub>		0.32	0.5	V
		LL60P	V <sub>F</sub>		0.24	0.5	V
	I <sub>F</sub> =30mA	LL60	V <sub>F</sub>		0.65	1.0	V
	I <sub>F</sub> =200mA	LL60P	V <sub>F</sub>		0.65	1.0	V
Reverse current	V <sub>R</sub> =15V	LL60	I <sub>R</sub>		0.1	0.5	µA
		LL60P	I <sub>R</sub>		0.5	1.0	µA
Junction capacitance	V <sub>R</sub> =1V, f=1MHz	LL60	C <sub>J</sub>		2.0		pF
	V <sub>R</sub> =10V, f=1MHz	LL60P	C <sub>J</sub>		6.0		pF
Reverse recovery time	I <sub>F</sub> =I <sub>R</sub> =1mA I <sub>rr</sub> =1mA R <sub>C</sub> =100Ω		t <sub>rr</sub>			1.0	ns

## Dimensions in mm

