



Schottky Barrier Diode

Features

1. High reliability
2. Low reverse current and low forward voltage
3. Small surface mounting type



Applications

Low current rectification and high speed switching

Construction

Silicon epitaxial planar

Absolute Maximum Ratings

$T_j=25^{\circ}\text{C}$

Parameter	Test Conditions	Symbol	Value	Unit
Repetitive peak reverse voltage		V_{RRM}	30	V
Forward continuous current	$T_a=25^{\circ}\text{C}$	I_F	200	mA
Repetitive peak forward surge current	$t_p < 1\text{ s}, \delta < 0.5, T_a=25^{\circ}\text{C}$	I_{FRM}	500	mA
Surge forward current	$t_p < 10\text{ms}, T_a=25^{\circ}\text{C}$	I_{FSM}	4	A
Power dissipation	$T_a=65^{\circ}\text{C}$	P_{tot}	200	mW
Junction temperature		T_j	125	$^{\circ}\text{C}$
Storage temperature range		T_s	-65~+150	$^{\circ}\text{C}$

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.



Electrical Characteristics

T_j=25 °C

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Reverse breakdown voltage			V _{(BR)R}	30			V
Forward voltage	I _F =10mA	LL42	V _F			0.4	V
	I _F =200mA	LL42	V _F			1.0	V
	I _F =2mA	LL43	V _F	0.26		0.33	V
	I _F =15mA	LL43	V _F			0.45	V
	I _F =50mA	LL43	V _F			0.65	V
	I _F =200mA	LL43	V _F			1.0	V
Reverse current	V _R =25V		I _R			0.5	μA
Pulse test t _p <300μs, δ<0.5	V _R =25V, T _j =100°C					100	
Capacitance	V _R =1V, f=1MHz		C _{tot}		7.0		pF
Reverse recovery time	I _F =10mA, I _R =10mA I _{rr} =1mA, R _L =100Ω		t _{rr}			5.0	ns

Characteristics (T_j=25 °C unless otherwise specified)

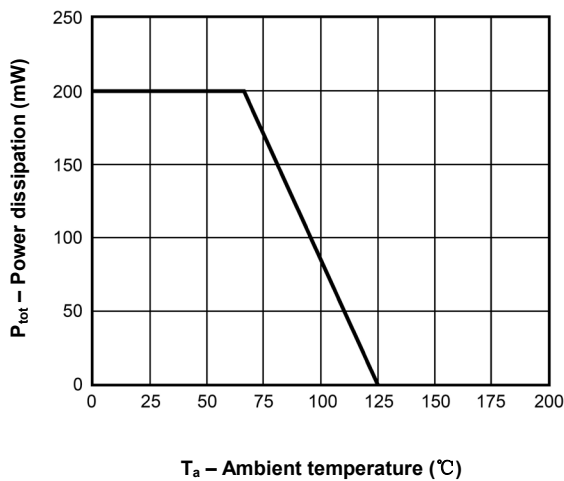


Figure 1. Admissible power dissipation vs. Ambient temperature

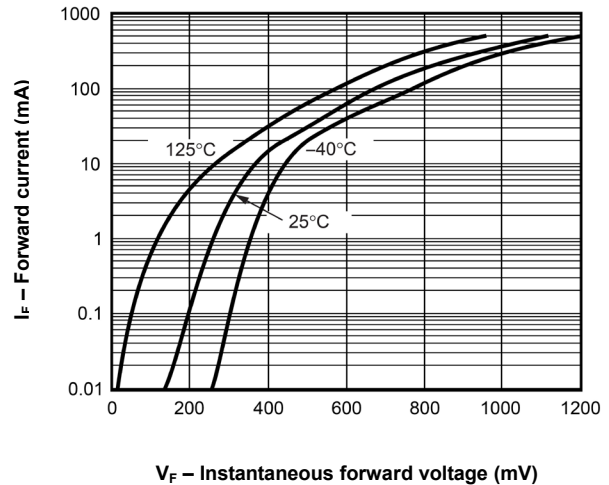


Figure 2. Typical reverse characteristics

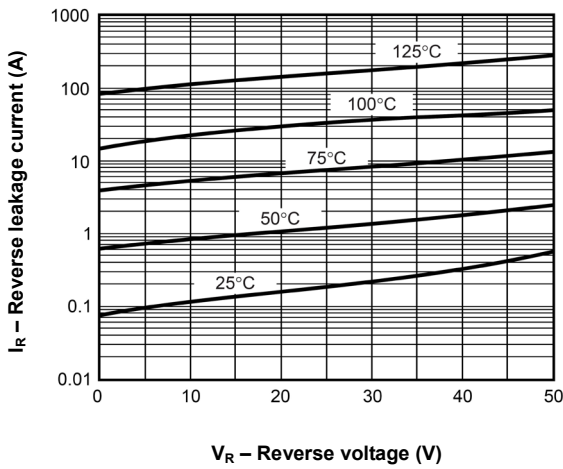


Figure 3. Typical reverse characteristics

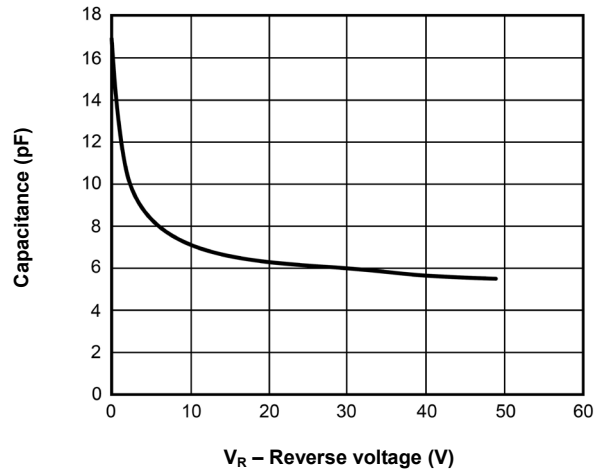
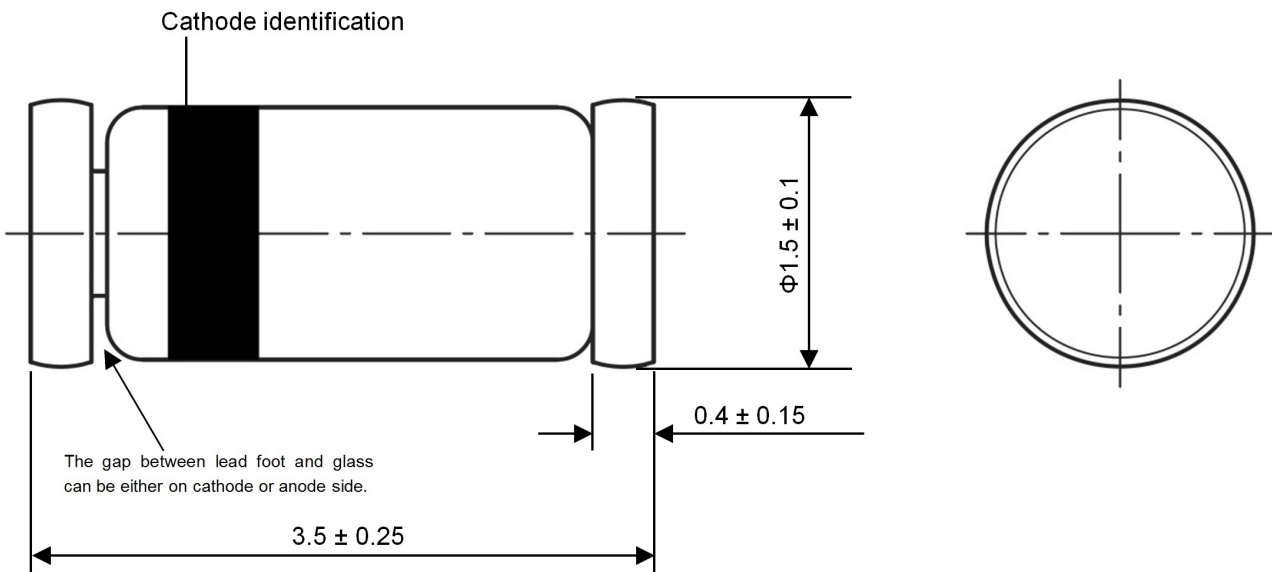


Figure 4. Typical capacitance vs. reverse applied voltage

Dimensions in mm



Glass Case
Mini Melf / SOD-80
JEDEC DO-213 AA