

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

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

Parameter	Test Conditions	Type	Symbol	Value	Unit
Repetitive peak reverse voltage		LL60	V_{RRM}	40	V
		LL60P	V_{RRM}	45	V
Peak forward surge current	$t_p \leq 1 \text{ s}$	LL60	I_{FSM}	150	mA
		LL60P	I_{FSM}	500	mA
Forward continuous current	$T_a=25^\circ\text{C}$	LL60	I_F	30	mA
		LL60P	I_F	50	mA
Storage temperature range			T_{stg}	-65~+125	$^\circ\text{C}$

Maximum Thermal Resistance

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

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	on PC board 50mm×50mm×1.6mm	R_{thJA}	250	K/W

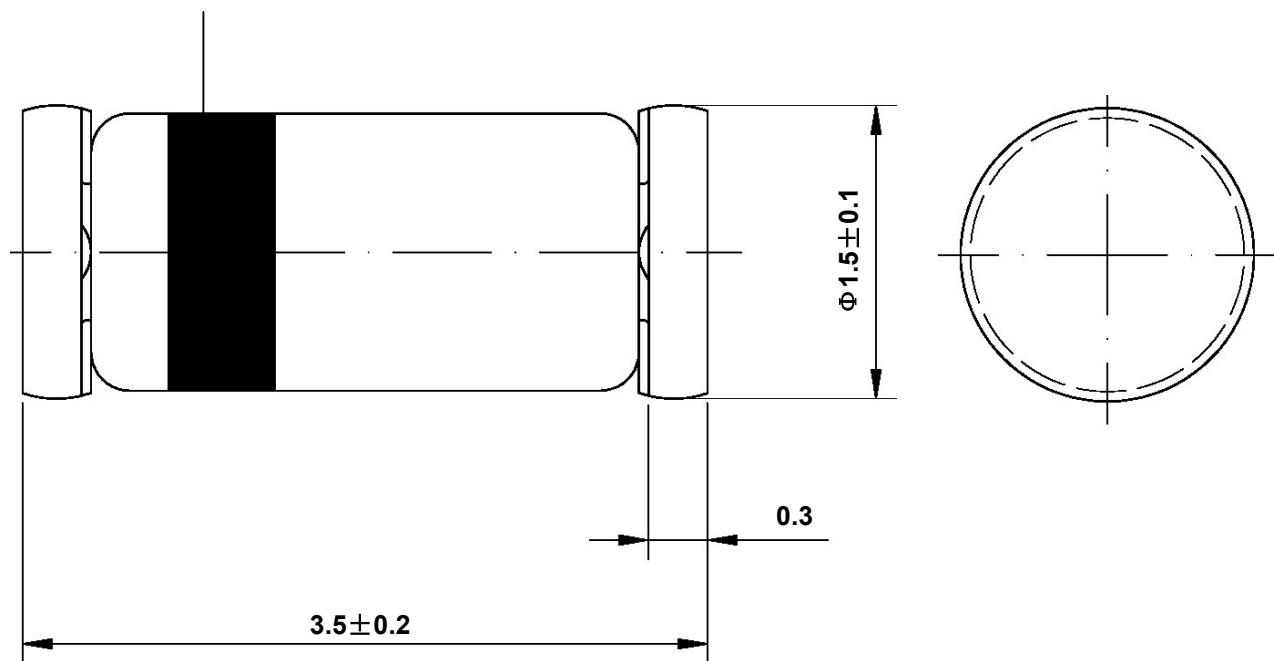
Electrical Characteristics

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

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=1\text{mA}$	LL60	V_F		0.32	0.5	V
		LL60P	V_F		0.24	0.5	V
	$I_F=30\text{mA}$	LL60	V_F		0.65	1.0	V
	$I_F=200\text{mA}$	LL60P	V_F		0.65	1.0	V
Reverse current	$V_R=15\text{V}$	LL60	I_R		0.1	0.5	μA
		LL60P	I_R		0.5	1.0	μA
Junction capacitance	$V_R=1\text{V}, f=1\text{MHz}$	LL60	C_J		2.0		pF
	$V_R=10\text{V}, f=1\text{MHz}$	LL60P	C_J		6.0		pF
Reverse recovery time	$I_F=I_R=1\text{mA} I_{rr}=1\text{mA} R_C=100\Omega$		t_{rr}			1.0	ns

Dimensions in mm

Cathode identification



Glass Case
Mini Melf / SOD 80
JEDEC DO 213 AA