

**SURFACE MOUNT LL-34 (SOD-80C)  
SWITCHING DIODE**

**FEATURES**

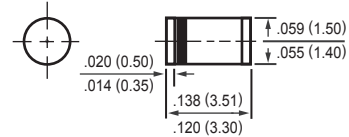
- \* Fast Switching Device( $T_{RR}<4.0\text{nS}$ )
- \* LL-34 Glass Case
- \* Through-Hole Device Type Mounting
- \* Hermetically Sealed Glass
- \* Compression Bonded Construction
- \* All external surfaces are corrosion resistant and leads are readily solderable

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.



**LL-34**



Dimensions in inches and (millimeters)

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

	Symbol	Value	UNIT
Reverse Voltage	$V_R$	75	V
Reverse Recovery Time $I_F=-I_R=10\text{mA}$ to $I_{RR}=-1\text{mA}$ $V_R=6\text{V}$ $R_L=100\text{ ohms}$	$t_{rr}$	4	ns
Power Dissipation at $T_{amb}=25^{\circ}\text{C}$ $3.33\text{mW}/^{\circ}\text{C}$	$P_{tot}$	500	mW
Forward Current	$I_F$	300	mA
Junction Temperature	$T_j$	175	$^{\circ}\text{C}$
Storage Temperature Range	$T_S$	-65 to +175	$^{\circ}\text{C}$

## Electrical Characteristics (Ta=25 °C)

	Symbol	Min	Max	Unit
Minimum Breakdown Voltage @I <sub>R</sub> = 100uA	BV	100	-	V
Rectifier Current (Average) Half Wave Rectification w/Resist Load at Ta= 25 °C and f > or = 50Hz	I <sub>O</sub>	-	150	mA
Peak Forward Surge Current PW<1 sec	I <sub>Fsurge</sub>	-	500	mA
Maximum Forward Voltage IF = 10 mA	V <sub>F</sub>	-	1.0	V
Maximum reverse Leakage Current at V <sub>R</sub> = 20V at V <sub>R</sub> = 75V at V <sub>R</sub> = 20V, T <sub>J</sub> = 150°C	I <sub>R</sub>	- - -	0.025 5.0 50	uA
Maximum Junction Capacitance V <sub>F</sub> =V <sub>R</sub> = 0, f= 1MHz	C <sub>j</sub>	-	4	pF
Reverse Recovery Time From I <sub>F</sub> = -I <sub>R</sub> =10mA to I <sub>RR</sub> =-1mA V <sub>R</sub> =6V R <sub>L</sub> =100 ohms	trr	-	4	ns
Maximum Thermal Resistance Junction to Ambient Air	R <sub>thJA</sub>	-	0.35	°C/mW
Rectification Efficiency at f=100MHZ, V <sub>rf</sub> = 2V	nv	0.45	-	-

Note : "Fully ROHS compliant", "100% Sn plating (Pb-free)".

VB 2007-2

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