

## 500 mW LL-34 Hermetically Sealed Glass – High Voltage Switching Diodes



SURFACE MOUNT  
LL34

### Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
$V_{RRM}$	Maximum Repetitive Reverse Voltage	250	V
$T_{STG}$	Storage Temperature Range	-65 to +200	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	200	$^\circ\text{C}$
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
$I_{FSM}$	Non-repetitive Peak Forward Current Pulse Width = 1.0 Second Pulse Width = 1.0 $\mu\text{second}$	1.0	A
		4.0	A

These ratings are limiting values above which the serviceability of the diode may be impaired.

DEVICE MARKING DIAGRAM



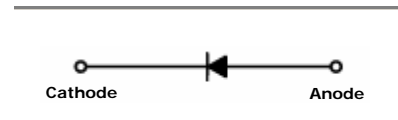
Cathode Band Color : Black

### Thermal Characteristics

Symbol	Parameter	Value	Units
$P_D$	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	350	$^\circ\text{C}/\text{W}$

### Specification Features:

- LL-34 (Mini-MELF) Package
- Surface Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All External Surfaces Are Corrosion Resistant And Terminals Are Readily Solderable
- RoHS Compliant
- Matte Tin (Sn) Lead Finish
- Color band Indicates Negative Polarity

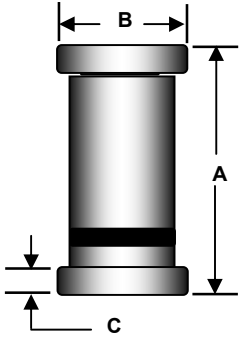


ELECTRICAL SYMBOL

### Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Limits		Unit	
			Min	Max		
$B_V$	Breakdown Voltage	TCBAV100 TCBAV101 TCBAV102 TCBAV103	$I_R=100\mu\text{A}$	60	---	Volts
				120	---	Volts
				200	---	Volts
				250	---	Volts
$I_R$	Reverse Leakage Current	TCBAV100 TCBAV101 TCBAV102 TCBAV103	$V_R=50\text{V}$ $V_R=100\text{V}$ $V_R=150\text{V}$ $V_R=200\text{V}$	---	100	nA
				---	100	nA
				---	100	nA
				---	100	nA
$V_F$	Forward Voltage	$I_F=100\text{mA}$	---	1.0	Volts	
$T_{RR}$	Reverse Recovery Time	$I_F=I_R=30\text{mA}$ , $R_L=100\Omega$ $I_{RR}=3\text{mA}$	---	50	nS	
$C$	Capacitance	$V_R=0\text{V}$ , $f=1\text{MHz}$	---	5.0	pF	

Package Outline

Package	Case Outline																												
LL34	 <table border="1" data-bbox="715 528 1410 819"> <thead> <tr> <th rowspan="3">DIM</th> <th colspan="4">LL-34</th> </tr> <tr> <th colspan="2">Millimeters</th> <th colspan="2">Inches</th> </tr> <tr> <th>Min</th> <th>Max</th> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>3.302</td> <td>3.505</td> <td>0.130</td> <td>0.138</td> </tr> <tr> <td>B</td> <td>1.397</td> <td>1.499</td> <td>0.055</td> <td>0.059</td> </tr> <tr> <td>C</td> <td>0.350</td> <td>0.500</td> <td>0.014</td> <td>0.020</td> </tr> </tbody> </table>	DIM	LL-34				Millimeters		Inches		Min	Max	Min	Max	A	3.302	3.505	0.130	0.138	B	1.397	1.499	0.055	0.059	C	0.350	0.500	0.014	0.020
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Notes:

1. All dimensions are within DO213AC JEDEC standard.
2. LL-34 polarity denoted by cathode band.

This datasheet presents technical data of Tak Cheong's Switching Diodes. Complete specifications for the individual devices are provided in the form of datasheets. A comprehensive Selector Guide is included to simplify the task of choosing the best set of components required for a specific application. For additional information, please visit our website <http://www.takcheong.com>.

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