TAK CHEONG®

SEMICONDUCTOR

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

SURFACE MOUNT
LL34

Absolute Maximum Ratings

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{RRM}	Maximum Repetitive Reverse Voltage	250	V
T_{STG}	Storage Temperature Range	-65 to +200	°C
T_J	Operating Junction Temperature	200	°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 μsecond	 1.0 4.0	 A A

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

DEVICE MARKING DIAGRAM

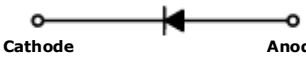
Cathode Band Color : Black

Thermal Characteristics

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



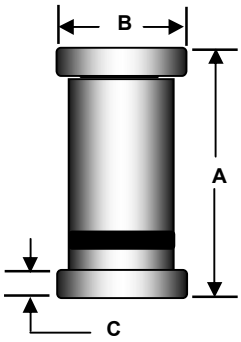
ELECTRICAL SYMBOL

Electrical Characteristics

T_A = 25°C unless otherwise noted

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

Package Outline

Package	Case Outline
LL34	

DIM	LL-34			
	Millimeters		Inches	
	Min	Max	Min	Max
A	3.30	3.60	0.130	0.142
B	1.40	1.50	0.055	0.059
C	0.35	0.50	0.014	0.020

Notes:

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

NOTICE

The information presented in this document is for reference only. Tak Cheong reserves the right to make changes without notice for the specification of the products displayed herein.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Tak Cheong Semiconductor Co., Ltd., or anyone on its behalf, assumes no responsibility or liability for any damagers resulting from such improper use of sale.

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