

SEMICONDUCTOR

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



Absolute Maximum Ratings $T_A = 25$ °C unless other wise noted

Symbol	Parameter	Value	Units
V _{RRM}	Maximum Repetitive Reverse Voltage	250	V
T _{STG}	Storage Temperature Range	-65 to +200	°C
TJ	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 _{eJA}	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		Unit
Symbol			rest condition	Min	Max	Oilit
Вν	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		$I_F=I_R=30mA$,			
			$R_L=100\Omega$		50	nS
			I _{RR} =3mA			
С	Capacitance		$V_R=0V$, $f=1M_{HZ}$		5.0	pF

Number: DB-060 November 2006 / C





Package Outline

Package		Case Outline				
	← B →			LL	-34	
		DIM	Millim	neters	Inches	
LL34	A	-	Min	Max	Min	Max
		А	3.30	3.50	0.130	0.138
	<u> </u>	В	1.40	1.50	0.055	0.059
	_	С	0.35	0.50	0.014	0.020

Notes:

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

Number: DB-060 November 2006 / C



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.

This publication supersedes & replaces all information reviously supplied. For additional information, please visit our website http://www.takcheong.com, or consult your nearest Tak Cheong's sales office for further assistance.

Number: DB-100 April 14, 2008 / A