

SEMICONDUCTOR

AXIAL LEAD

DO35

DEVICE MARKING DIAGRAM L ΒA Vx

L : Logo Device Code : TCBAVxx

500 mW DO-35 Hermetically Sealed Glass - High Voltage **Switching Diodes**

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

| Symbol | Parameter | Value | Units |
|---------------------|--|-------------|--------|
| V _{RRM} | Maximum Repetitive Reverse Voltage | 250 | V |
| T _{STG} | Storage Temperature Range | -65 to +175 | °C |
| TJ | Operating Junction Temperature | +175 | °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.

Thermal Characteristics

| Symbol | Parameter | Value | Units |
|------------------|---|-------|-------|
| PD | Power Dissipation | 500 | mW |
| R _{0JA} | Thermal Resistance, Junction to Ambient | 300 | °C/W |

Specification Features:

- § DO-35 Package (JEDEC)
- § Through-Hole Device Type Mounting
- § Hermetically Sealed Glass
- § § **Compression Bonded Construction**
- All External Surfaces Are Corrosion Resistant And Leads Are Readily Solderable
- § **RoHS** Compliant
- § Solder Hot Dip Tin (Sn) Lead Finish
- § Cathode Indicated By Polarity Band

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

| Ormakal | Deremeter | | Test Condition | Limits | | 1114 |
|-----------------|-------------------------|----------------|--------------------------------------|--------|------|-------|
| Symbol | DI Parameter Test Cor | Test Condition | Min | Max | Unit | |
| Bv | Breakdown Voltage | TCBAV19 | I _R =100μΑ | 120 | | Volts |
| | | TCBAV20 | | 200 | | Volts |
| | | TCBAV21 | | 250 | | Volts |
| I _R | Reverse Leakage Current | TCBAV19 | V _R =100V | | 100 | nA |
| | | TCBAV20 | V _R =150V | | 100 | nA |
| | | TCBAV21 | V _R =200V | | 100 | nA |
| VF | Forward Voltage | | I _F =100mA | | 1.0 | Volts |
| | | | I _F =200mA | | 1.25 | Volts |
| T _{RR} | Reverse Recovery Time | | I _F =I _R =30mA | | | |
| | | | R _L =100Ω | | 50 | nS |
| | | | I _{RR} =3mA | | | |





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| | С | Capacitance | $V_R=0V$, f=1 M_{HZ} | | 5.0 | pF |
|--|---|-------------|-------------------------|--|-----|----|
|--|---|-------------|-------------------------|--|-----|----|

Package Outline



Notes:

1. All dimensions are within JEDEC standard.

2. DO35 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. Although information in this datasheet has been carefully checked, no responsibility for the inaccuracies can be assumed by Tak Cheong. Please consult your nearest Tak Cheong's sales office for further assistance. Tak Cheong reserves the right to make changes without further notice to any products herein to further improve reliability, function or design, cost and productivity. TAK CHEONG are registered trademarks of Tak Cheong Electronics (Holdings) Co., Ltd. Number: DB-280

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