

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

### 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	+175	$^\circ\text{C}$
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
$I_{FSM}$	Non-repetitive Peak Forward Current Pulse Width = 1.0 Second	1.0	A
		Pulse Width = 1.0 $\mu\text{second}$	4.0

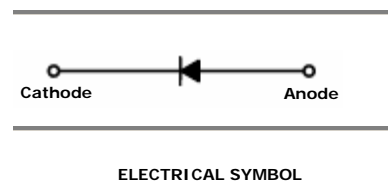
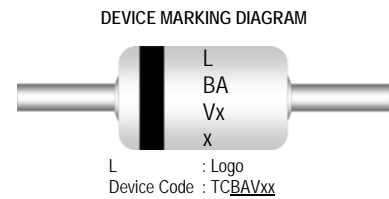
These ratings are limiting values above which the serviceability of the diode may be impaired.

### Thermal Characteristics

Symbol	Parameter	Value	Units
$P_D$	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	300	$^\circ\text{C}/\text{W}$

### Specification Features:

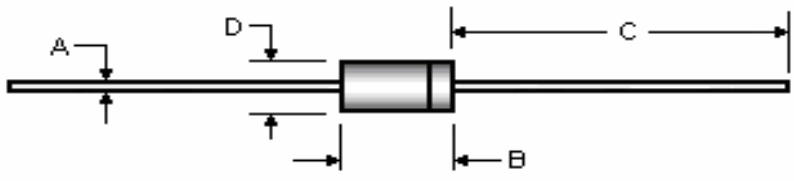
- DO-35 Package (JEDEC)
- Through-Hole Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All external surfaces are corrosion resistant and leads are readily solderable
- RoHS Compliant
- Solder hot dip Tin (Sn) lead finish
- Cathode indicated by polarity band



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

Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
$B_V$	Breakdown Voltage	TCBAV19 $I_R=100\mu\text{A}$	120	---	Volts
			200	---	Volts
			250	---	Volts
$I_R$	Reverse Leakage Current	TCBAV19 $V_R=100\text{V}$	---	100	nA
		TCBAV20 $V_R=150\text{V}$	---	100	nA
		TCBAV21 $V_R=200\text{V}$	---	100	nA
$V_F$	Forward Voltage	$I_F=100\text{mA}$ $I_F=200\text{mA}$	---	1.0	Volts
			---	1.25	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				
DO-35					
	<b>DO-35</b>				
	<b>DIM</b>	<b>Millimeters</b>		<b>Inches</b>	
		Min	Max	Min	Max
	<b>A</b>	0.46	0.55	0.018	0.022
	<b>B</b>	3.05	5.08	0.120	0.200
<b>C</b>	25.40	38.10	1.000	1.500	
<b>D</b>	1.53	2.28	0.060	0.090	


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.

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