

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 μsecond	4.0

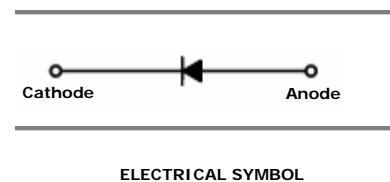
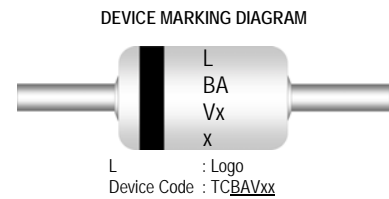
These ratings are limiting values above which the serviceability of the diode may be impaired.

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:

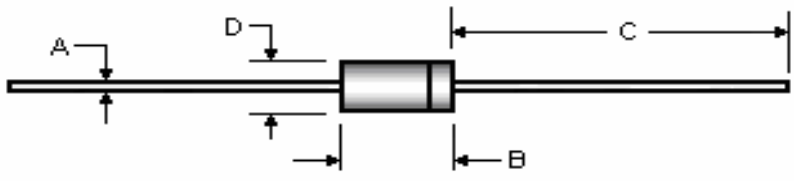
- DO-35 Package (JEDEC)
- Through-Hole Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All external surfaces are corrosion resistant and leads are readily solderable
- RoHS Compliant
- Solder hot dip Tin (Sn) lead finish
- Cathode indicated by polarity band



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

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

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