TAK CHEONG®

SEMICONDUCTOR

300 mW DO-34 Hermetically Sealed Glass - High Voltage Switching Diodes

AXIAL LEAD
DO34

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 +150	°C
T_J	Operating Junction Temperature	+150	°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

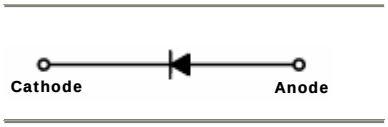
L : Logo
Device Code : TC1SS244M

Thermal Characteristics

Symbol	Parameter	Value	Units
P_D	Power Dissipation	300	mW

Specification Features:

- DO-34 Package (JEDEC)
- Through-Hole Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All External Surfaces Are Corrosion Resistant And Lads Are Readily Solderable
- RoHS Compliant
- Solder Hot Dip Tin (Sn) Terminal Finish
- Cathode Indicated By Polarity Band



ELECTRICAL SYMBOL

Electrical Characteristics

T_A = 25°C unless otherwise noted

Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B_V	Breakdown Voltage	I_R=100µA	250	---	Volts
I_R	Reverse Leakage Current	V_R=220V	---	10	µA
V_F	Forward Voltage	I_F=200mA	---	1.5	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

Typical Characteristics

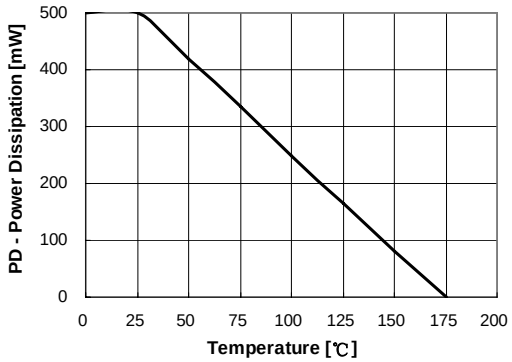


Figure 1. Power Dissipation vs Ambient Temperature
Valid provided leads at a distance of 0.8mm from case are kept at ambient temperature

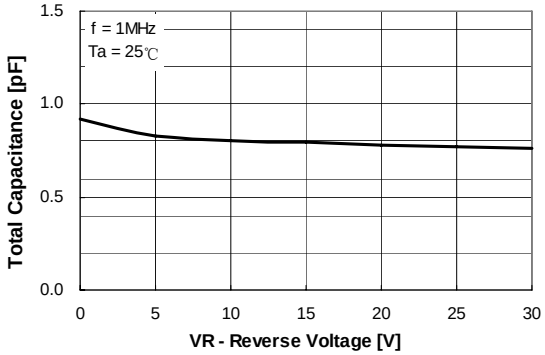


Figure 2. Total Capacitance

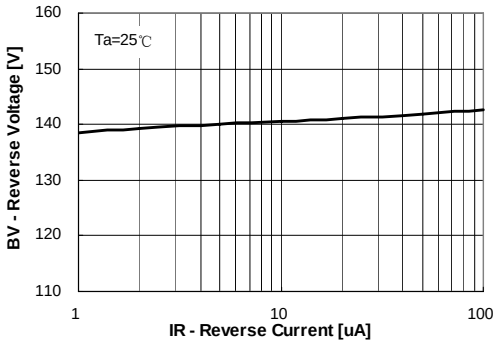


Figure 3. Reverse Voltage vs Reverse Current
BV – 1.0uA to 100uA

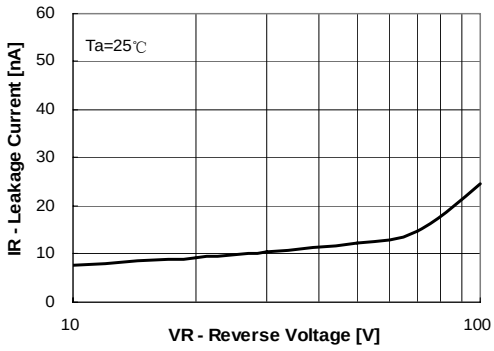


Figure 4. Reverse Current vs Reverse Voltage
IR – 10V to 100V

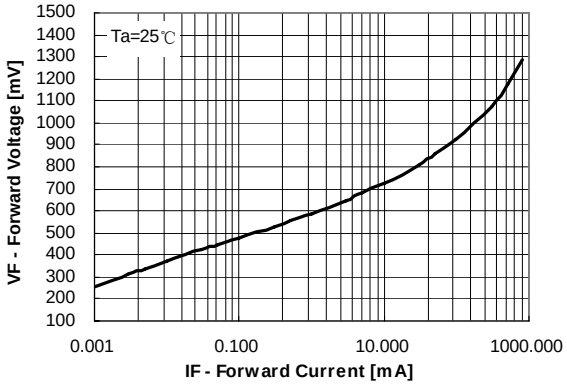


Figure 5. Forward Voltage vs Forward Current
VF – 0.001mA to 800mA

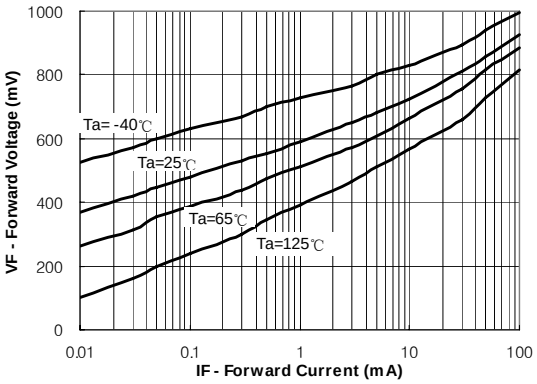
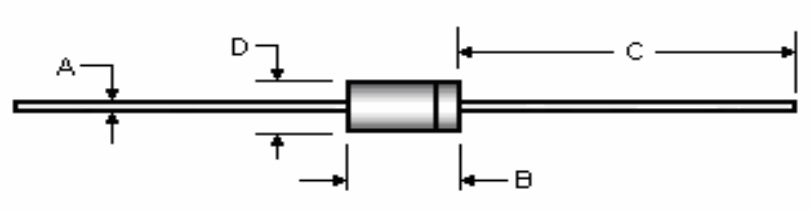


Figure 6. Forward Voltage vs Ambient Temperature
VF – 0.01mA to 100mA (-40 to +125 Deg C)

Package Outline

Package	Case Outline
DO-34	

DIM	DO-34			
	Millimeters		Inches	
	Min	Max	Min	Max
A	0.46	0.55	0.018	0.022
B	2.16	3.04	0.085	0.120
C	25.40	38.10	1.000	1.500
D	1.27	1.90	0.050	0.075

Notes:

1. All dimensions are within JEDEC standard.
2. DO34 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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