

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


 AXIAL LEAD
DO34

DEVICE MARKING DIAGRAM


 L : Logo
 Device Code : TC1SS244M

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 +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	+150	$^\circ\text{C}$
$I_F(AV)$	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

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	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

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

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

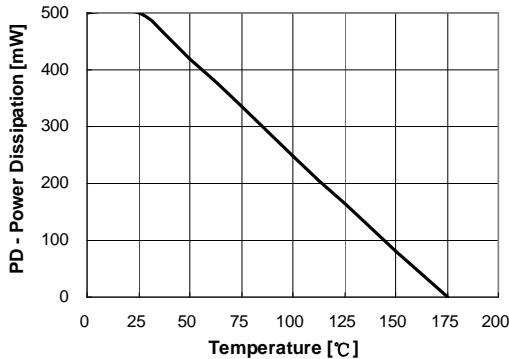
Typical Characteristics


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

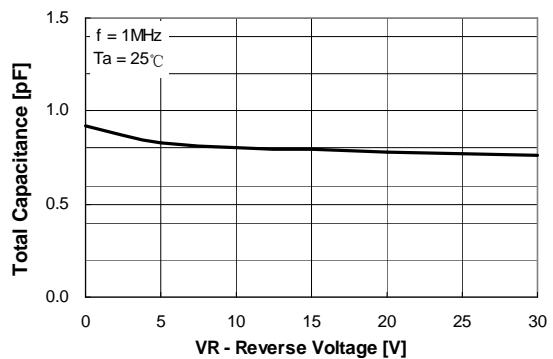


Figure 2. Total Capacitance

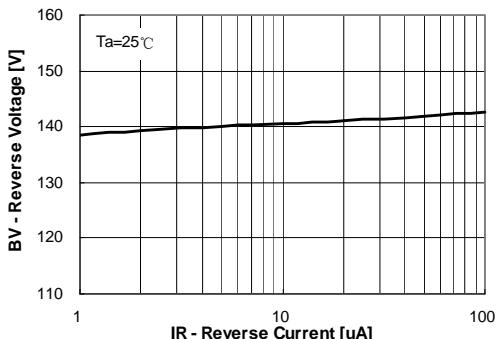


Figure 3. Reverse Voltage vs Reverse Current
BV – 1.0uA to 100uA

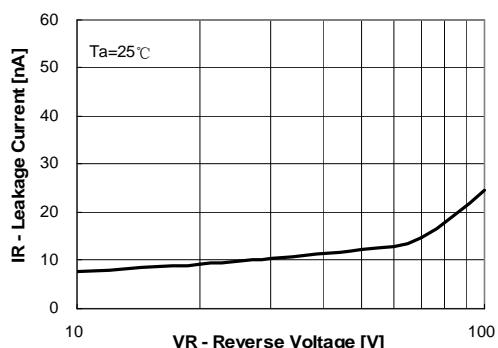


Figure 4. Reverse Current vs Reverse Voltage
IR – 10V to 100V

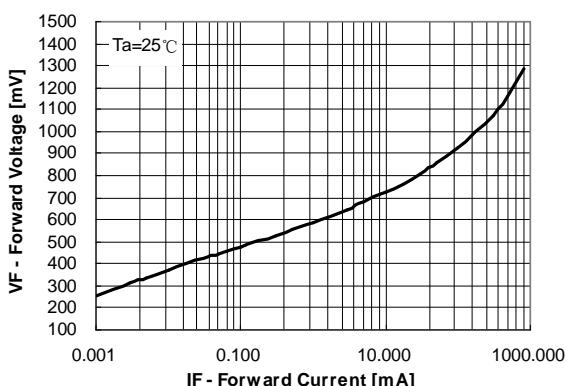


Figure 5. Forward Voltage vs Forward Current
VF – 0.001mA to 800mA

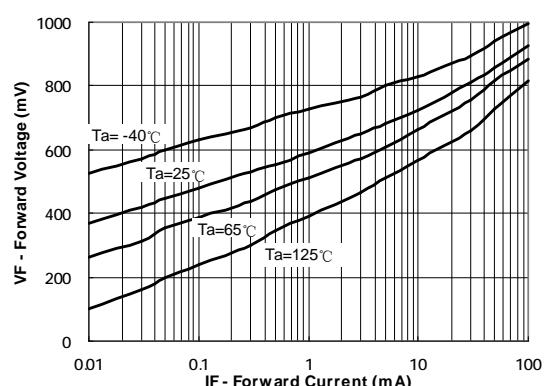
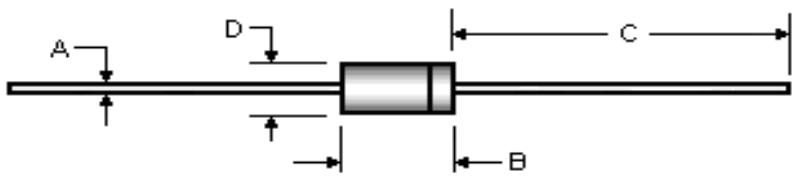


Figure 6. Forward Voltage vs Ambient Temperature
VF – 0.01mA to 100mA (-40 to +125 Deg C)

Package Outline

Package	Case Outline				
DO-34	 DO-34				
	DIM	Millimeters		Inches	
		Min	Max	Min	Max
	A	0.46	0.55	0.018	0.022
	B	---	3.04	---	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.