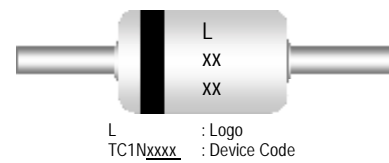


500 mW DO-35 Hermetically Sealed Glass Fast Switching Diodes



DEVICE MARKING DIAGRAM



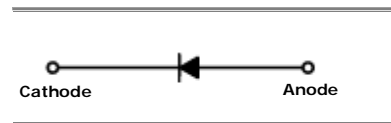
Absolute Maximum Ratings T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P _D	Power Dissipation	500	mW
T _{STG}	Storage Temperature Range	-65 to +150	°C
T _J	Operating Junction Temperature	+150	°C
W _{IV}	Working Inverse Voltage	75	V
I _O	Average Rectified Current	150	mA
I _{FM}	Non-repetitive Peak Forward Current	450	mA
I _{FSURGE}	Peak Forward Surge Current (Pulse Width = 1.0 μsecond)	2	A

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

Specification Features:

- § Fast Switching Device (T_{RR} <4.0 nS)
- § 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) 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	100		Volts
		I _R =5μA	75		
I _R	Reverse Leakage Current	V _R =20V		25	nA
		V _R =75V		5	μA
V _F	Forward Voltage	TC1N4448, TC1N914B I _F =5mA	0.62	0.72	Volts
		TC1N4148 I _F =10mA		1.0	
		TC1N4448, TC1N914B I _F =100mA		1.0	
T _{RR}	Reverse Recovery Time	I _F =10mA, V _R =6V R _L =100Ω I _{RR} =1mA		4	nS
C	Capacitance	V _R =0V, f=1MHz		4	pF

Typical Characteristics

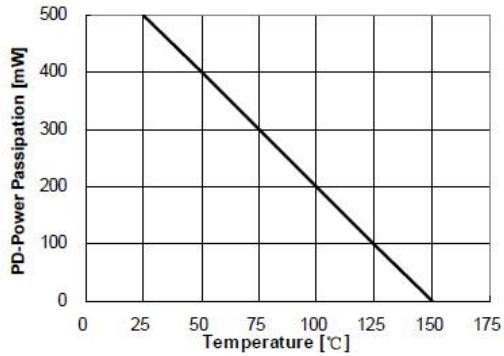


Figure 1. Power Dissipation vs Ambient Temperature
Valid provided leads at a distance of 0.8mm from case are kept at ambient temperature

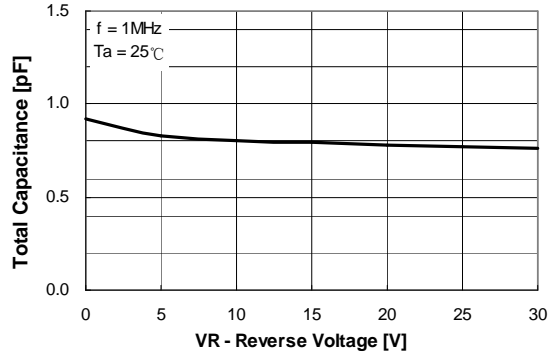


Figure 2. Total Capacitance

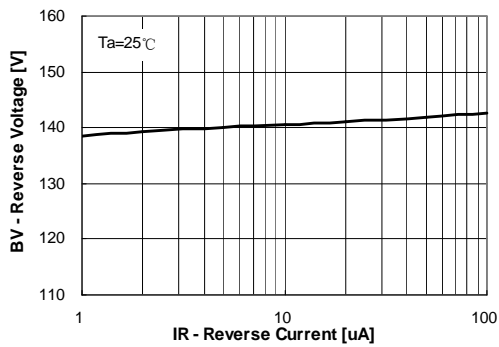


Figure 3. Reverse Voltage vs Reverse Current
BV – 1.0uA to 100uA

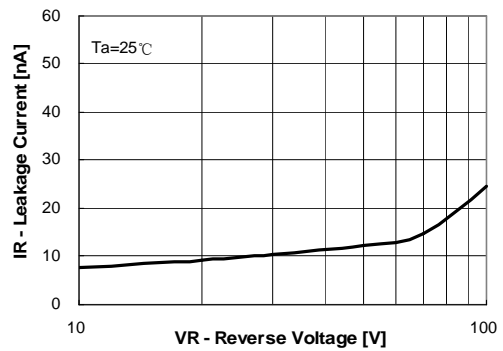


Figure 4. Reverse Current vs Reverse Voltage
IR – 10V to 100V

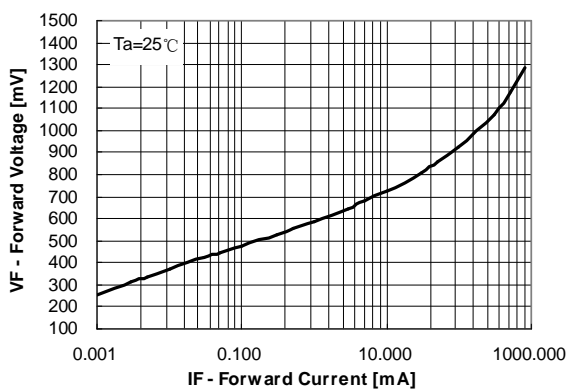


Figure 5. Forward Voltage vs Forward Current
VF – 0.001mA to 800mA

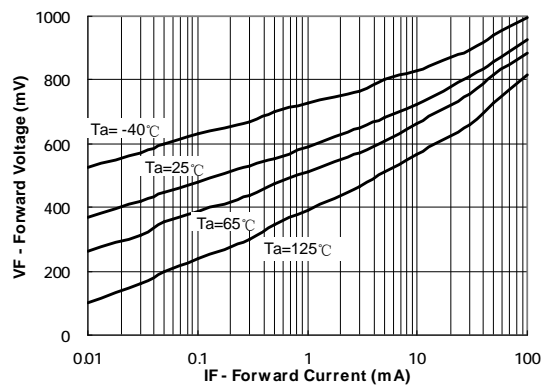
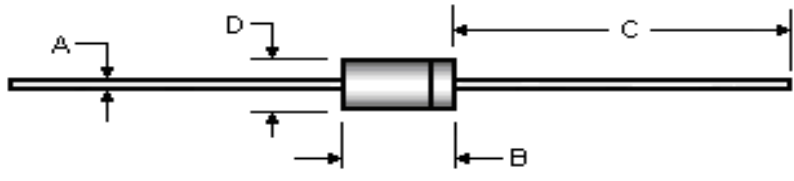


Figure 6. Forward Voltage vs Ambient Temperature
VF – 0.01mA to 100mA (-40 to +125 Deg C)

Package Outline

Package	Case Outline			
DO-35				
DO-35	DO-35			
DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	0.46	0.55	0.018	0.022
B	---	4.00	---	0.157
C	25.40	38.10	1.000	1.500
D	1.53	2.00	0.060	0.079

Notes:

1. All dimensions are within JEDEC standard.
2. DO35 polarity denoted by cathode band.