

# Fast Switching Diodes DO-35 Package

1N4148TR

MERITEK

## FEATURE

- Working Reverse Voltage: 75V
- Peak Power Dissipation: 500mW
- Forward Surge Current: 2A
- Hermetically Sealed Glass



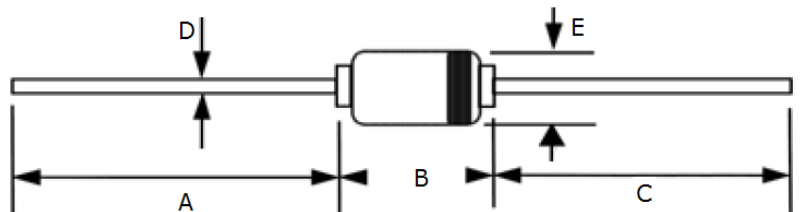
## MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
Peak Power Dissipation	$P_{PPM}$	0.5	Watt
Working Reverse Voltage	$W_{RV}$	75	Volts
Average Rectified Current	$I_O$	150	mA
Non-repetitive Peak Forward Current	$I_{FM}$	450	mA
Peak forward surge current (Pulse Width = 1.0 )	$I_{FSURGE}$	2	A
Operating junction Temperature Range	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-65~+150	°C

Ratings at 25°C ambient temperature unless otherwise specified.

## DIMENSIONS

Item	DO-41G (mm)	
	Min.	Max.
A	25.0	-
B	-	5.10
C	25.0	-
D	0.457	0.559
E	-	2.28



## ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Min.	Max.	Units	
Breakdown Voltage	$V_{BR}$	$I_R=100\mu A$	100	-	V
		$I_R=5\mu A$	75	-	
Reverse Leakage Current	$I_R$	$V_R=20V$	-	25	nA
		$V_R=75V$	-	5	$\mu A$
Forward Voltage	$V_F$	-	1.0	V	
Reverse Recovery Time	$T_{RR}$	$I_F=10mA, V_R=6.0V$	-	4.0	nS
		$R_L=100\Omega, I_{RR}=1.0mA$	-	4.0	
Capacitance	$C$	-	4.0	pF	

# Fast Switching Diodes DO-35 Package

1N4148TR	<b>MERITEK</b>
----------	----------------

## RATING AND CHARACTERISTIC CURVES

Figure 1. Power Dissipation vs Ambient Temperature

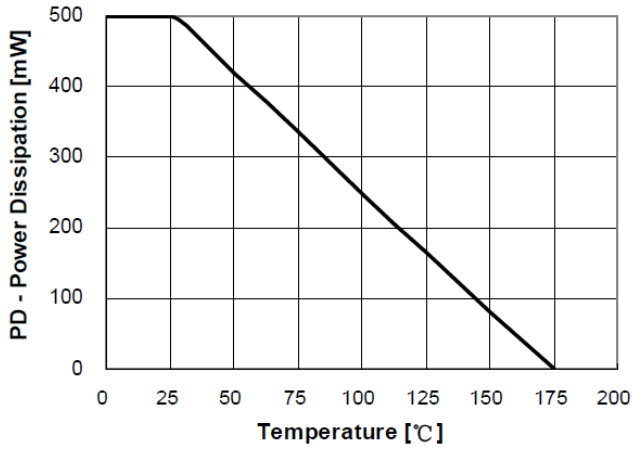


Figure 2. Total Capacitance

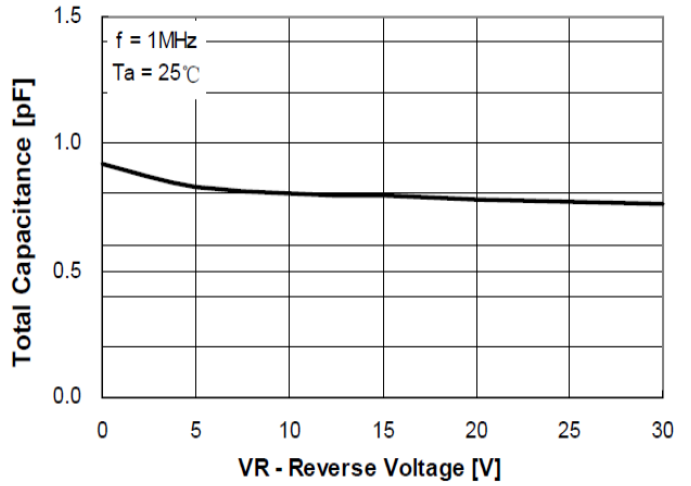


Figure 3. Reverse Voltage vs Reverse Current  
BV - 1.0uA to 100uA

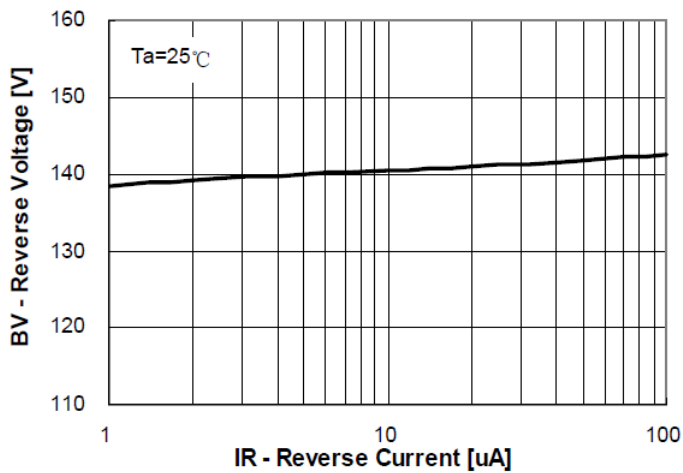


Figure 4. Reverse Current vs Reverse Voltage  
IR - 10V to 100V

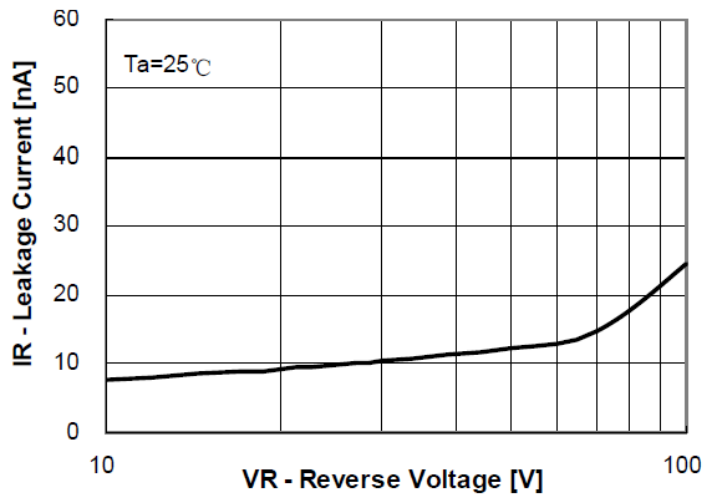


Figure 5. Forward Voltage vs Forward Current  
VF - 0.001mA to 800mA

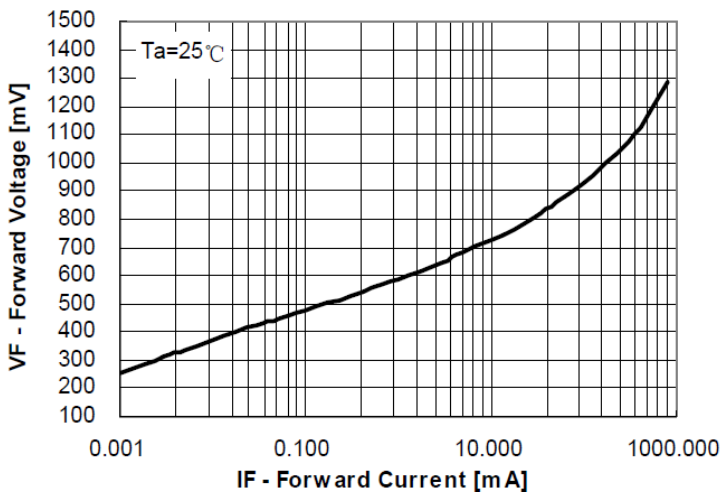


Figure 6. Forward Voltage vs Ambient Temperature  
VF - 0.01mA to 100mA (-40 to +125 Deg C)

