

# Silicon Switching Diode

**1N4153,  
1N4153-1**

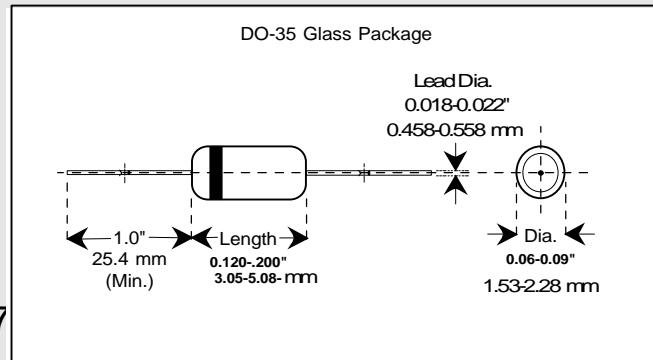
# DO-35 Glass Package

## Applications

Used in general purpose applications, where a low current controlled forward characteristic and fast switching speed are important.

## Features

- Six sigma quality
- Metallurgically bonded
- BKC's Sigma Bond™ plating for problem free solderability
- LL-34/35 MELF SMD available
- Full approval to Mil-S-19500/337
- Available up to JANTXV-1 levels
- "S" level screening available to SCDs



Maximum Ratings	Symbol	Value	Unit	
Peak Inverse Voltage	PIV	75 (Min.)	Volts	
Average Rectified Current	$I_{Avg}$	150	mAmps	
Continuous Forward Current	$I_{Fdc}$	300	mAmps	
Peak Surge Current ( $t_{peak} = 1$ Sec.)	$I_{peak}$	0.25	Amp	
BKC Power Dissipation $T_L = 50^\circ C, L = 3/8"$ from body	$P_{tot}$	500	mWatts	
Operating and Storage Temperature Range	$T_{Op \& St}$	-65 to +200	$^\circ C$	
Electrical Characteristics @ 25 $^\circ C^*$	Symbol	Minimum	Maximum	Unit
Forward Voltage @ $I_F = 100 \mu A$ $V_F$	$V_f$	0.49	0.55	Volts
Forward Voltage @ $I_F = 250 \mu A$ $V_F$	$V_f$	0.53	0.59	Volts
Forward Voltage @ $I_F = 1.0$ mA $V_F$	$V_f$	0.59	0.67	Volts
Forward Voltage @ $I_F = 2.0$ mA $V_F$	$V_f$	0.62	0.70	Volts
Forward Voltage @ $I_F = 10$ mA $V_F$	$V_F$	0.70	0.81	Volts
Forward Voltage @ $I_F = 20$ mA $V_F$	$V_F$	0.74	0.88	Volts
Reverse Leakage Current @ $V_R = 50$ V	$I_R$		0.05(50 @ 150 $^\circ C$ )	$\mu A$
Breakdown Voltage @ $I_R = 5.0 \mu A$	PIV	75		Volts
Capacitance @ $V_R = 0$ V, $f = 1$ MHz	$C_T$		2.0	pF
Reverse Recovery Time (note 1)	$t_{rr}$		4.0	nSecs
Reverse Recovery Time (note 2)	$t_{rr}$		2.0	nSec

Note 1: Per Method 4031-A with  $I_F = I_R = 10$  mA,  $R_L = 100$  Ohms,  $C = 3$  Pf. \*Unless Otherwise Specified

Note2: Per Method 4031-A with  $I_F = I_R = 10$  mA,  $R_r = 6$  Volts,  $R_l = 100$  ohms.



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