

Silicon Switching Diode

**1N4153,
1N4153-1**

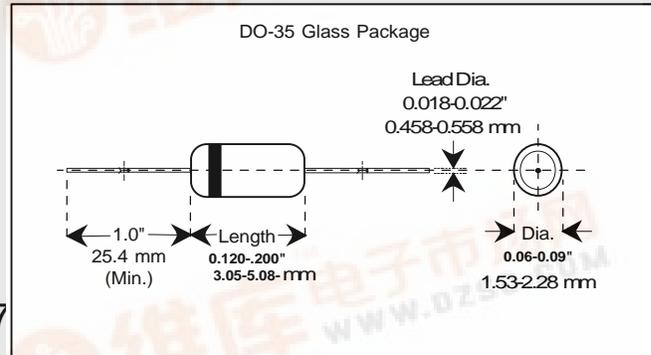
DO-35 Glass Package

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 $T_L = 50$ °C, $L = 3/8$ " from body	P_{tot}	500	mWatts	
Operating and Storage Temperature Range	$T_{Op \& St}$	-65 to +200	°C	
Electrical Characteristics @ 25 °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	0.70	0.81	Volts
Forward Voltage @ $I_F = 20$ mA	V_F	0.74	0.88	Volts
Reverse Leakage Current @ $V_R = 50$ V	I_R		0.05(50 @ 150 °C)	μA
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.



Microsemi

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