

# 1SS176

## HIGH SPEED SWITCHING DIODE

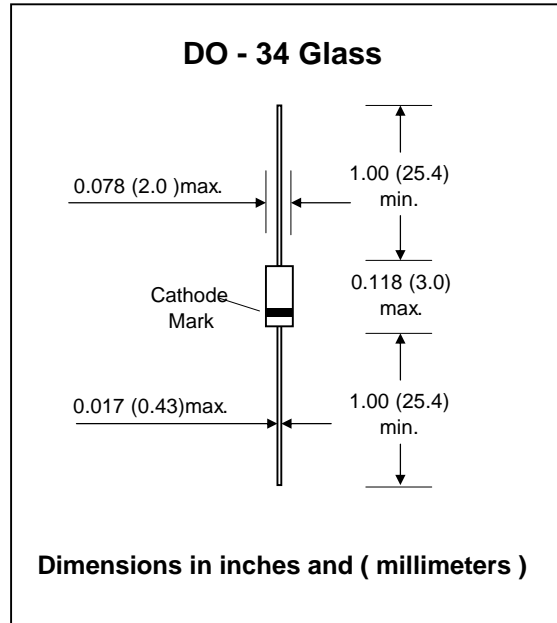
### FEATURES :

- High switching speed: max. 4 ns
- Continuous reverse voltage: max. 30 V
- Repetitive peak reverse voltage: max. 35 V
- Pb / RoHS Free

### MECHANICAL DATA :

Case: DO-34 Glass Case

Weight: approx. 0.093g



### Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specific.)

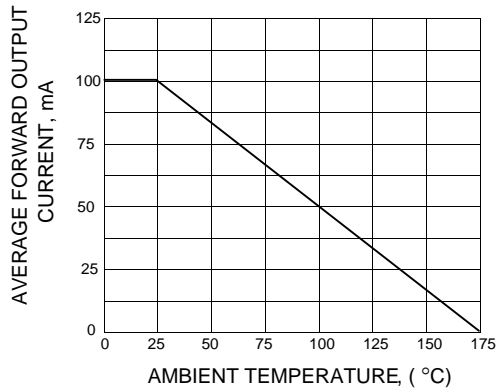
Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	35	V
Maximum Continuous Reverse Voltage	$V_{RM}$	30	V
Maximum Average Forward Current	$I_F$	100	mA
Maximum Peak Forward Current	$I_{FM}$	300	mA
Maximum Power Dissipation	$P_D$	300	mW
Maximum Non-repetitive Peak Forward Current	$I_{FSM}$	1000	mA
Maximum Junction Temperature	$T_J$	175	°C
Storage Temperature Range	$T_S$	-65 to + 175	°C

### Electrical Characteristics (Ta = 25°C unless otherwise noted)

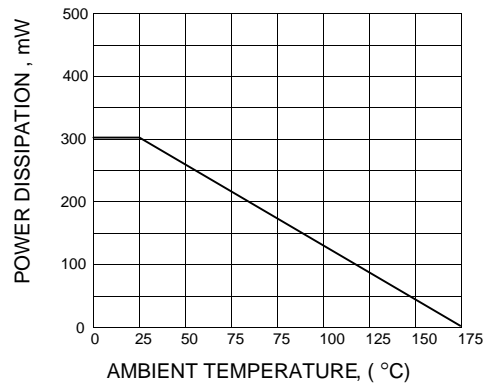
Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Current	$I_R$	$V_R = 35 V$	-	-	0.5	$\mu A$
Forward Voltage	$V_F$	$I_F = 100 mA$	-	-	1.2	V
Capacitance between terminals	$C_T$	$f = 1MHz ; V_R = 0.5 V$	-	-	3.0	pF
Reverse Recovery Time	$T_{rr}$	$I_F = 10 mA , V_R = 6 V$ $R_L = 50 \Omega$	-	-	4.0	ns

**RATING AND CHARACTERISTIC CURVES ( 1SS176 )**

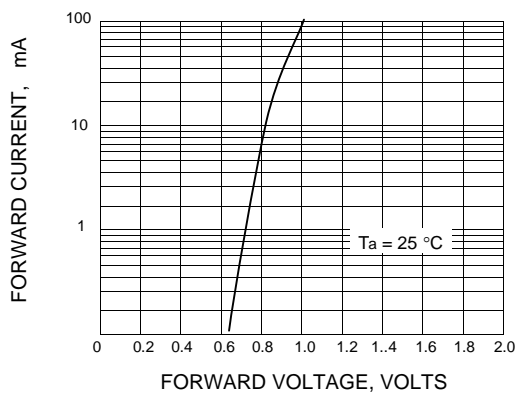
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.2 - POWER DERATING CURVE**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

