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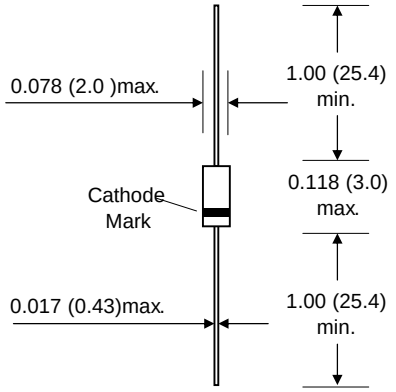
1SS176

HIGH SPEED SWITCHING DIODE

DO - 34 Glass



Dimensions in inches and (millimeters)

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 specifiec.)

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	μA
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	Trr	I_F = 10 mA , V_R = 6 V R_L = 50 Ω	-	-	4.0	ns

RATING AND CHARACTERISTIC CURVES (1SS176)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

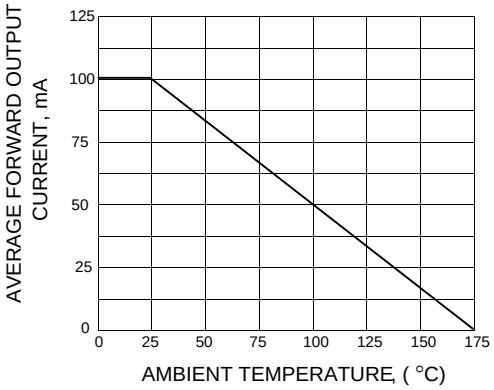


FIG.2 - POWER DARATING CURVE

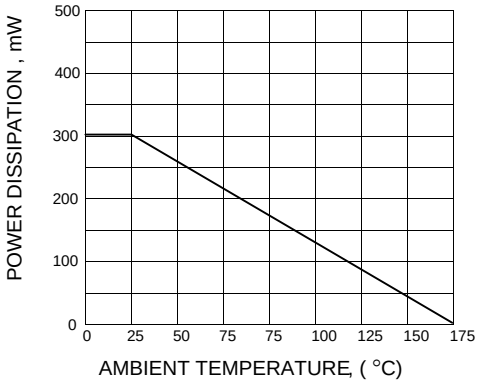


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

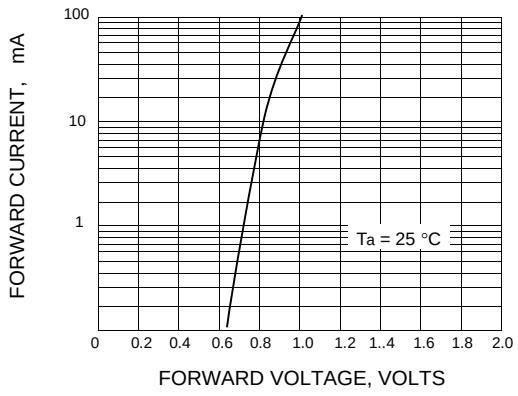


FIG.4 - TYPICAL REVERSE CHARACTERISTICS