SYNSEMI SEMICONDUCTOR

1S2076A

HIGH SPEED SWITCHING DIODE

PRV : 70 Volts
Io : 150 mA

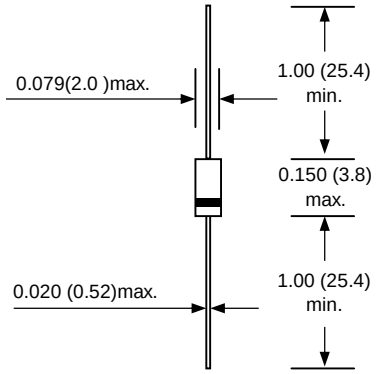
FEATURES :

* Silicon Epitaxial Planar Diode
* High reliability
* Low reverse current
* Low forward voltage drop
* High speed switching
* Pb / RoHS Free

MECHANICAL DATA :

* Case : DO-35 Glass Case
* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.13 gram (approximately)

DO - 35



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	70	V
Maximum Reverse Voltage	V_R	60	V
Maximum Average Forward Current	$I_{F(AV)}$	150	mA
Maximum Non-Repetitive Peak Forward Current (t < 1s)	I_{FSM}	1.0	A
Maximum Power Dissipation , Ta = 25 °C	P_D	250	mW
Maximum Forward Voltage at I_F = 10 mA	V_F	0.8	V
Maximum Reverse Current at V_R = 30V	I_R	100	nA
Maximum Reverse Recovery Time (I_F = 10mA, V_R = 6V , R_L = 50Ω)	Trr	4.0	ns
Maximum Capacitance Between Lead (VR = 1 V, f = 1MHz)	C	3.0	pF
Junction Temperature Range	T_J	175	°C
Storage Temperature Range	T_{STG}	- 65 to + 175	°C

RATING AND CHARACTERISTIC CURVES (1S2076A)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

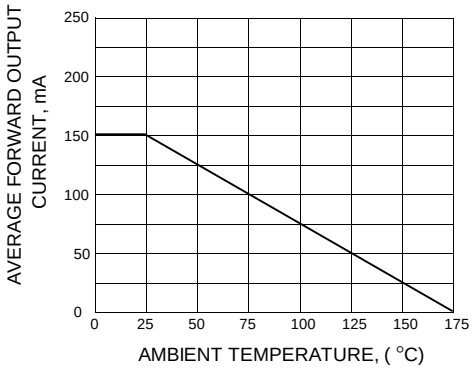


FIG.2 - POWER DARATING CURVE

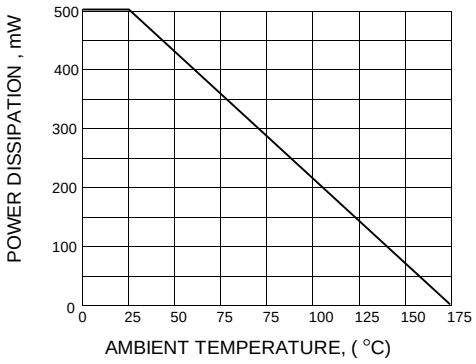


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

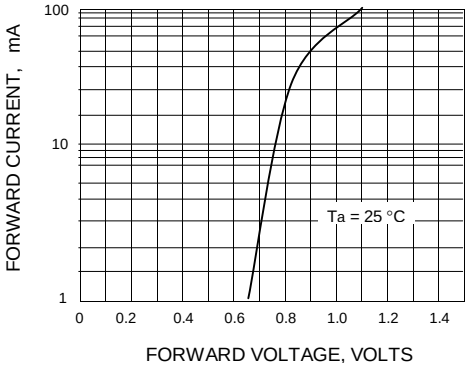


FIG.4 - TYPICAL REVERSE CHARACTERISTICS